



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 211416
ANALYTICAL REPORT**

Baseline Environmental
5900 Hollis Street
Emeryville, CA 94608

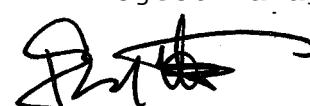
Project : Y0239-04.A3
Location : Doyle Drive
Level : III

<u>Sample ID</u>	<u>Lab ID</u>
E027	211416-001
E026	211416-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: 
Project Manager

Date: 04/28/2009

Signature: 
Senior Program Manager

Date: 04/29/2009

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: **211416**
Client: **Baseline Environmental**
Project: **Y0239-04.A3**
Location: **Doyle Drive**
Request Date: **04/14/09**
Samples Received: **04/14/09**

This data package contains sample and QC results for two water samples, requested for the above referenced project on 04/14/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

High response was observed for gasoline C7-C12 in the CCV analyzed 04/16/09 07:44; this analyte was not detected at or above the RL in the associated samples.

High surrogate recoveries were observed for bromofluorobenzene (FID) in the MS/MSD for batch 149987; the parent sample was not a project sample.

E027 (lab # 211416-001) and E026 (lab # 211416-002) had pH greater than 2. These samples were analyzed within 7 day hold time for unpreserved containers.

No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Matrix spikes were not performed for this analysis in batch 150274 due to insufficient sample amount.

No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

The vial for E026 (lab # 211416-002) was not preserved at pH <= 2, reducing hold time to 7 days. Since vials are not opened prior to analysis, the laboratory was not aware of the lack of preservative in advance, and this sample was analyzed outside of hold.

Low response was observed for vinyl acetate in the ICV analyzed 04/01/09 16:39; this analyte was not detected at or above the RL in the associated samples.

Low response was observed for bromomethane in the CCV analyzed 04/21/09 10:03; this analyte met minimum response criteria. High response was observed for carbon tetrachloride; this analyte was not detected at or above the RL in the associated samples.

Low response was observed for bromomethane in the CCV analyzed 04/23/09 09:47; this analyte met minimum response criteria. High responses were observed for carbon tetrachloride and 1,1,1-trichloroethane; these analytes

CASE NARRATIVE

Laboratory number: **211416**
Client: **Baseline Environmental**
Project: **Y0239-04.A3**
Location: **Doyle Drive**
Request Date: **04/14/09**
Samples Received: **04/14/09**

Volatile Organics by GC/MS (EPA 8260B):

were not detected at or above the RL in the associated samples.

Matrix spikes were not performed for this analysis in batch 150243 due to insufficient sample amount.

Matrix spikes were not performed for this analysis in batch 150153 due to insufficient sample amount.

E027 (lab # 211416-001) had pH greater than 2. This sample was analyzed within the 7 day hold time for unpreserved containers.

E026 (lab # 211416-002) had multiple vials combined due to sediment.

No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):

High response was observed for acenaphthylene in the ICV analyzed 03/12/09 20:07; this analyte was not detected at or above the RL in the associated samples.

Low responses were observed for 3,3'-dichlorobenzidine, 3-nitroaniline, and 4-nitroaniline in the CCV analyzed 04/20/09 10:07; these analytes met minimum response criteria.

Matrix spikes were not performed for this analysis in batch 150046 due to insufficient sample amount.

Low surrogate recoveries were observed for terphenyl-d14 in E027 (lab # 211416-001) and E026 (lab # 211416-002).

No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A.

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B.

Matrix spikes were not performed for this analysis in batch 150170 due to insufficient sample amount.

CASE NARRATIVE

Laboratory number: **211416**
Client: **Baseline Environmental**
Project: **Y0239-04.A3**
Location: **Doyle Drive**
Request Date: **04/14/09**
Samples Received: **04/14/09**

PCBs (EPA 8082):

Low surrogate recoveries were observed for decachlorobiphenyl in E027 (lab # 211416-001), E026 (lab # 211416-002), and the method blank/BS/BSD for batch 150170; the corresponding TCMX surrogate recoveries were within limits.

No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):

No analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Dissolved Sulfide (SM4500S2-D):

No analytical problems were encountered.

Total Suspended Solids (TSS) (SM2540D):

Low recovery was observed for total suspended solids in the matrix spike for batch 150027; the parent sample was not a project sample, and the BS/BSD were within limits.

No other analytical problems were encountered.

pH (EPA 9040C):

No analytical problems were encountered.

Chemical Oxygen Demand (SM5220D):

No analytical problems were encountered.

Chain of Custody

BASELINE Environmental Consulting

5900 Hollis Street, Suite D
Emeryville CA 94608

Emergency phone number: 1-800-888-4610

CHAIN OF CUSTODY RECORD

CHAIN OF CUSTODY RECORD

Turn-Around-Time Standard
Laboratory Curtis and Tompkins, Ltd.
BASELINE Contact Person Cheri Page

14 JUNE 1984

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 211416

Date Received 4/14/09

Number of coolers 1

Client GASLINE

Project DOYLE DRIVE

Date Opened 4/14/09

By (print) M.VILLANUEVA

(sign)

Date Logged in

By (print)

(sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
 Shipping info _____

2A. Were custody seals present? YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? YES NO

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

 Bubble Wrap Foam blocks Bags None Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) _____

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

CEDIMENTOT 1H SAMPLES

Laboratory Job Number 211416

ANALYTICAL REPORT

TPH-Purgeables and/or BTXE by GC

Matrix: Water

Total Volatile Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	149987
Units:	ug/L	Sampled:	04/14/09
Diln Fac:	1.000	Received:	04/14/09

Field ID: E027 Lab ID: 211416-001
 Type: SAMPLE Analyzed: 04/16/09

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate		
Bromofluorobenzene (FID)	88	65-135

Field ID: E026 Lab ID: 211416-002
 Type: SAMPLE Analyzed: 04/16/09

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate		
Bromofluorobenzene (FID)	88	65-135

Type: BLANK Analyzed: 04/15/09
 Lab ID: QC491913

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate		
Bromofluorobenzene (FID)	81	65-135

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC491914	Batch#:	149987
Matrix:	Water	Analyzed:	04/15/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	3,000	2,718	91	75-125

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	113	65-135

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	149987
MSS Lab ID:	211428-001	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Analyzed:	04/15/09
Diln Fac:	1.000		

Type: MS Lab ID: QC491915

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,507	2,000	3,053	77	75-125
Surrogate %REC Limits					
Bromofluorobenzene (FID)	138 *	65-135			

Type: MSD Lab ID: QC491916

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	2,000	3,137	81	75-125	3 35
Surrogate %REC Limits					
Bromofluorobenzene (FID)	146 *	65-135			

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
 Calnum : 349140128001
 Units : ng

Name : GC19 surr ICAL 097
 Date : 07-APR-2009 19:59
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	097_012	349140128012	SURROGATE_1	07-APR-2009 19:59	S11560 (5000X)
L2	097_013	349140128013	SURROGATE_2	07-APR-2009 20:36	S11560 (5000X)
L3	097_014	349140128014	SURROGATE_3	07-APR-2009 21:14	S11560 (5000X)
L4	097_015	349140128015	SURROGATE_4	07-APR-2009 21:52	S11560 (5000X)
L5	097_016	349140128016	SURROGATE_5	07-APR-2009 22:29	S11560 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Bromofluorobenzene (FID)	A	349.65	349.27	375.14	331.27	355.84	AVRG		0.00284		352.24	4	0.995	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Bromofluorobenzene (FID)	A	450.0	-1	450.0	-1	450.0	7	450.0	-6	450.0	1

PDM 04/09/09 : separated from coeluting peak, TFT (FID), run _014 and _015

Analyst: PDM

Date: 04/09/09

Reviewer: ATL

Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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349140128001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCVOA Water: EPA 8015B

Inst : GC19

Name : gc19_tvhical_098

Calnum : 349142093002

Date : 08-APR-2009 18:06

Units : ng

X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	098_004	349142093004	TVH_14	08-APR-2009 18:06	S11030 (1000X), S11560 (5000X)
L2	098_005	349142093005	TVH_15	08-APR-2009 18:43	S11029 (1000X), S11560 (5000X)
L3	098_006	349142093006	TVH_16	08-APR-2009 19:21	S11028 (1000X), S11560 (5000X)
L4	098_007	349142093007	TVH_17	08-APR-2009 19:58	S11027 (2000X), S11560 (5000X)
L5	098_008	349142093008	TVH_18	08-APR-2009 20:36	S11027 (1000X), S11560 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	2905.0	2350.9	2241.1	2072.7	2108.8	AVRG		4.28E-4		2335.7	14	0.995	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	24	2500	1	10000	-4	25000	-11	50000	-10

PDM 04/16/09 : separated from coeluting peak, TFT and corrected automatically drawn baseline integrations

Analyst: PDM

Date: 04/16/09

Reviewer: ATL

Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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349142093002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 GCVOA Water
EPA 8015B

Inst : GC19 Name : gc19_tvhical_098
Calnum : 349142093002 Cal Date : 08-APR-2009

ICV 349142093011 (098_011 08-APR-2009) stds: S11652 (1000X), S11560 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	2335.7	2120.1	10000	9077	ng	-9	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 211416 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : QC491914 IDF : 1.0
Seqnum : 349151690006.1 File : 105_006 Time : 15-APR-2009 11:20
Standards: S11826 (666.7X), S11560 (5000X)

Analyte	Ch	Cal	Caldate	Avg	RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	349142093002	08-APR-2009	2335.7	2116.4	15000	13590	ng	-9	15	15	u
Bromofluorobenzene (FID)	A	349140128001	07-APR-2009	352.24	397.89	450.0	508.3	ng	13	15	15	u

Analyst: PDM Date: 04/22/09 Reviewer: ATL Date: 04/23/09

u=use

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349151690006.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : TVH IDF : 1.0
Seqnum : 349151690016 File : 105_016 Time : 15-APR-2009 19:31
Standards: S11826 (1000X), S11560 (5000X)

Analyte	Ch	Cal	Caldate	Avg	RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	349142093002	08-APR-2009	2335.7	2078.4	10000	8898	ng	-11	15		
Bromofluorobenzene (FID)	A	349140128001	07-APR-2009	352.24	381.89	450.0	487.9	ng	8	15		

PDM 04/17/09 : PID surrogates are not applicable.

Analyst: PDM Date: 04/17/09 Reviewer: ATL Date: 04/23/09
Page 1 of 1 349151690016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : TVH IDF : 1.0
Seqnum : 349151690029 File : 105_029 Time : 16-APR-2009 07:44
Standards: S11652 (2000X), S11560 (5000X)

Analyte	Ch	Cal	Caldate	Avg						%D	Max %D	Flags
				RF/CF	RF/CF	Spiked	Quant	Units				
Gasoline C7-C12	A	349142093002	08-APR-2009	2335.7	2783.5	5000	5959	ng	19	15	c+ ***	
Bromofluorobenzene (FID)	A	349140128001	07-APR-2009	352.24	344.86	450.0	440.6	ng	-2	15		

PDM 04/16/09 : this is the 3rd CCV run with a different std. # as the first two

PDM 04/16/09 : possible high bias for gas range C7-C12, reporting ND samples only in associated bracket

PDM 04/17/09 : PID surrogates are not applicable.

Analyst: PDM Date: 04/17/09 Reviewer: ATL Date: 04/23/09

+high bias c=CCV

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349151690029

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 349140128

Instrument : GC19
 Method : EPA 8015B, EPA 8021B

Begun : 04/07/09 07:28
 SOP Version : TVH_BTXE_rv14

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	097_001	X	IB			04/07/09 07:28	1.0	1
002	097_002	X	CMARK			04/07/09 08:06	1.0	2 1
003	097_003	X	BTXE			04/07/09 08:44	1.0	3 1
004	097_004	X	TVH			04/07/09 09:21	1.0	4 1
005	097_005	X	BTXE			04/07/09 09:59	1.0	3 1
006	097_006	X	IB			04/07/09 16:09	1.0	1
007	097_007	X	211165-001	Miscell.	149706	04/07/09 16:46	10000	1
008	097_008	X	IB			04/07/09 17:24	1.0	1
009	097_009	X	IB			04/07/09 18:01	1.0	1
010	097_010	X	IB			04/07/09 18:44	1.0	1
011	097_011	IB	CALIB			04/07/09 19:21	1.0	1
012	097_012	ICAL	SURROGATE_1			04/07/09 19:59	1.0	1
013	097_013	ICAL	SURROGATE_2			04/07/09 20:36	1.0	1
014	097_014	ICAL	SURROGATE_3			04/07/09 21:14	1.0	1
015	097_015	ICAL	SURROGATE_4			04/07/09 21:52	1.0	1
016	097_016	ICAL	SURROGATE_5			04/07/09 22:29	1.0	1

PDM 04/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 016.

Analyst: PDM Date: 04/09/09 Reviewer: ATL Date: 04/16/09

Standards used: 1=S11560 2=S10996 3=S11540 4=S11652

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 349142093

Instrument : GC19
 Method : EPA 8015B, EPA 8021B

Begun : 04/08/09 16:13
 SOP Version : TVH_BTXE_rv14

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	098_001	X	IB			04/08/09 16:13	1.0	1
002	098_002	X	IB			04/08/09 16:50	1.0	1
003	098_003	IB	CALIB			04/08/09 17:28	1.0	1
004	098_004	ICAL	TVH_14			04/08/09 18:06	1.0	2 1
005	098_005	ICAL	TVH_15			04/08/09 18:43	1.0	3 1
006	098_006	ICAL	TVH_16			04/08/09 19:21	1.0	4 1
007	098_007	ICAL	TVH_17			04/08/09 19:58	1.0	5 1
008	098_008	ICAL	TVH_18			04/08/09 20:36	1.0	5 1
009	098_009	X	IB			04/08/09 21:13	1.0	1
010	098_010	X	ICV			04/08/09 21:51	1.0	6 1
011	098_011	ICV	TVH			04/08/09 22:29	1.0	6 1
012	098_012	X	IB			04/08/09 23:06	1.0	1
013	098_013	CMARKER				04/08/09 23:44	1.0	7 1

PDM 04/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 013.

Analyst: PDM Date: 04/09/09 Reviewer: ATL Date: 04/16/09
 Standards used: 1=S11560 2=S11030 3=S11029 4=S11028 5=S11027 6=S11652 7=S11819

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 349151690

Instrument : GC19
 Method : EPA 8015B, EPA 8021B

Begun : 04/15/09 08:10
 SOP Version : TVH_BTXE_rv14

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	105_001	X	CMARK			04/15/09 08:10	1.0	1 2	
002	105_002	X	CCV			04/15/09 08:47	1.0	3 2	
003	105_003	X	CCV			04/15/09 09:25	1.0	4 2	
004	105_004	X	BTXE			04/15/09 10:03	1.0	3 2	
005	105_005	X	CCV			04/15/09 10:42	1.0	3 2	
006	105_006	CCV/LCS	QC491914	Water	149987	04/15/09 11:20	1.0	4 2	
007	105_007	BLANK	QC491913	Water	149987	04/15/09 12:07	1.0	2	
008	105_008	MSS	211428-001	Water	149987	04/15/09 14:30	1.0	2	
009	105_009	MS	QC491915	Water	149987	04/15/09 15:08	1.0	4 2	
010	105_010	MSD	QC491916	Water	149987	04/15/09 15:45	1.0	4 2	
011	105_011	SAMPLE	211428-002	Water	149987	04/15/09 16:23	1.0	2	
012	105_012	SAMPLE	211428-003	Water	149987	04/15/09 17:01	1.0	2	
013	105_013	SAMPLE	211428-004	Water	149987	04/15/09 17:38	1.0	2	
014	105_014	SAMPLE	211428-005	Water	149987	04/15/09 18:16	1.0	2	
015	105_015	X	TVH		149987	04/15/09 18:53	1.0	4 2	
016	105_016	CCV	TVH		149987	04/15/09 19:31	1.0	4 2	
017	105_017	X	CMARK			04/15/09 20:08	1.0	1 2	
018	105_018	SAMPLE	211429-001	Water	149987	04/15/09 20:46	1.0	2	
019	105_019	SAMPLE	211429-002	Water	149987	04/15/09 21:24	1.0	2	
020	105_020	SAMPLE	211429-003	Water	149987	04/15/09 22:01	1.0	2	
021	105_021	SAMPLE	211424-001	Water	149987	04/15/09 22:39	1.0	2	
022	105_022	SAMPLE	211424-002	Water	149987	04/15/09 23:17	1.0	2	
023	105_023	SAMPLE	211424-003	Water	149987	04/15/09 23:54	1.0	2	
024	105_024	SAMPLE	211416-001	Water	149987	04/16/09 00:32	1.0	2	pH > 2
025	105_025	SAMPLE	211416-002	Water	149987	04/16/09 01:09	1.0	2	pH > 2
026	105_026	X	TVH		149987	04/16/09 01:47	1.0	4 2	
027	105_027	X	TVH		149987	04/16/09 02:24	1.0	4 2	
028	105_028	X	CMARK			04/16/09 03:02	1.0	1 2	
029	105_029	CCV	TVH		149987	04/16/09 07:44	1.0	5 2	

PDM 04/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 029.

PDM 04/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 029.

Analyst: PDM Date: 04/16/09 Reviewer: ATL Date: 04/23/09

Standards used: 1=S11819 2=S11560 3=S11540 4=S11826 5=S11652

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Laboratory Job Number 211416

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/14/09
Units:	ug/L	Received:	04/14/09
Diln Fac:	1.000		

Field ID: E027 Prepared: 04/23/09
 Type: SAMPLE Analyzed: 04/26/09
 Lab ID: 211416-001 Cleanup Method: EPA 3630C
 Batch#: 150274

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	64	61-127

Field ID: E026 Prepared: 04/15/09
 Type: SAMPLE Analyzed: 04/20/09
 Lab ID: 211416-002 Cleanup Method: EPA 3630C
 Batch#: 149994

Analyte	Result	RL
Diesel C12-C24	120 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	73	61-127

Type: BLANK Prepared: 04/15/09
 Lab ID: QC491945 Analyzed: 04/21/09
 Batch#: 149994 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	97	61-127

Type: BLANK Prepared: 04/23/09
 Lab ID: QC493061 Analyzed: 04/27/09
 Batch#: 150274 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	61	61-127

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC491946	Batch#:	149994
Matrix:	Water	Prepared:	04/15/09
Units:	ug/L	Analyzed:	04/21/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,049	82	65-135

Surrogate	%REC	Limits
o-Terphenyl	82	61-127

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	149994
MSS Lab ID:	211364-004	Sampled:	04/09/09
Matrix:	Water	Received:	04/11/09
Units:	ug/L	Prepared:	04/15/09
Diln Fac:	1.000	Analyzed:	04/21/09

Type: MS Cleanup Method: EPA 3630C
 Lab ID: QC491947

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	808.5	2,500	3,013	88	65-135

Surrogate	%REC	Limits
o-Terphenyl	87	61-127

Type: MSD Cleanup Method: EPA 3630C
 Lab ID: QC491948

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	3,194	95	65-135	6	35

Surrogate	%REC	Limits
o-Terphenyl	90	61-127

RPD= Relative Percent Difference

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Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	150274
Units:	ug/L	Prepared:	04/23/09
Diln Fac:	1.000	Analyzed:	04/27/09

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC493062

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,436	97	65-135

Surrogate	%REC	Limits
o-Terphenyl	106	61-127

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC493063

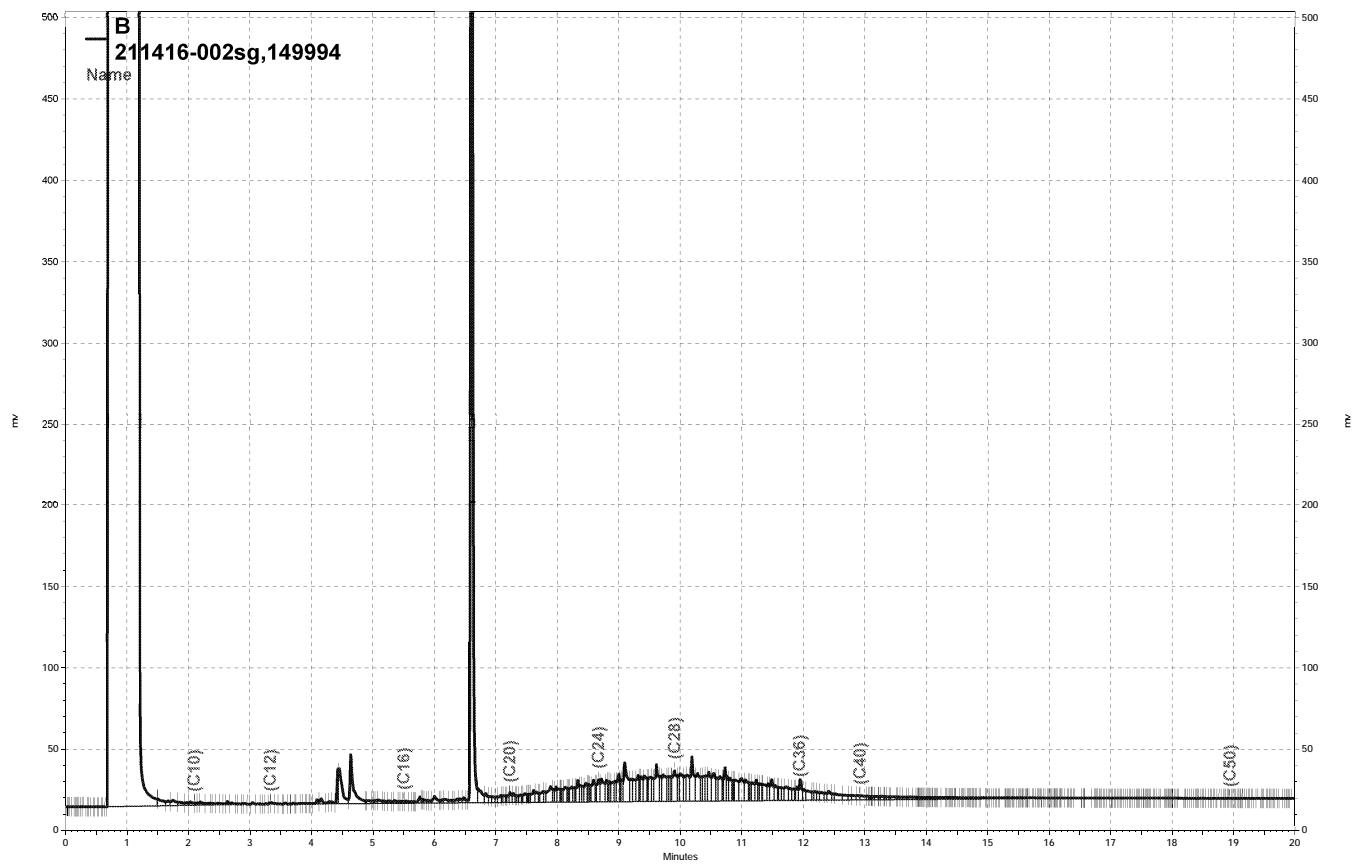
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,210	88	65-135	10	35

Surrogate	%REC	Limits
o-Terphenyl	94	61-127

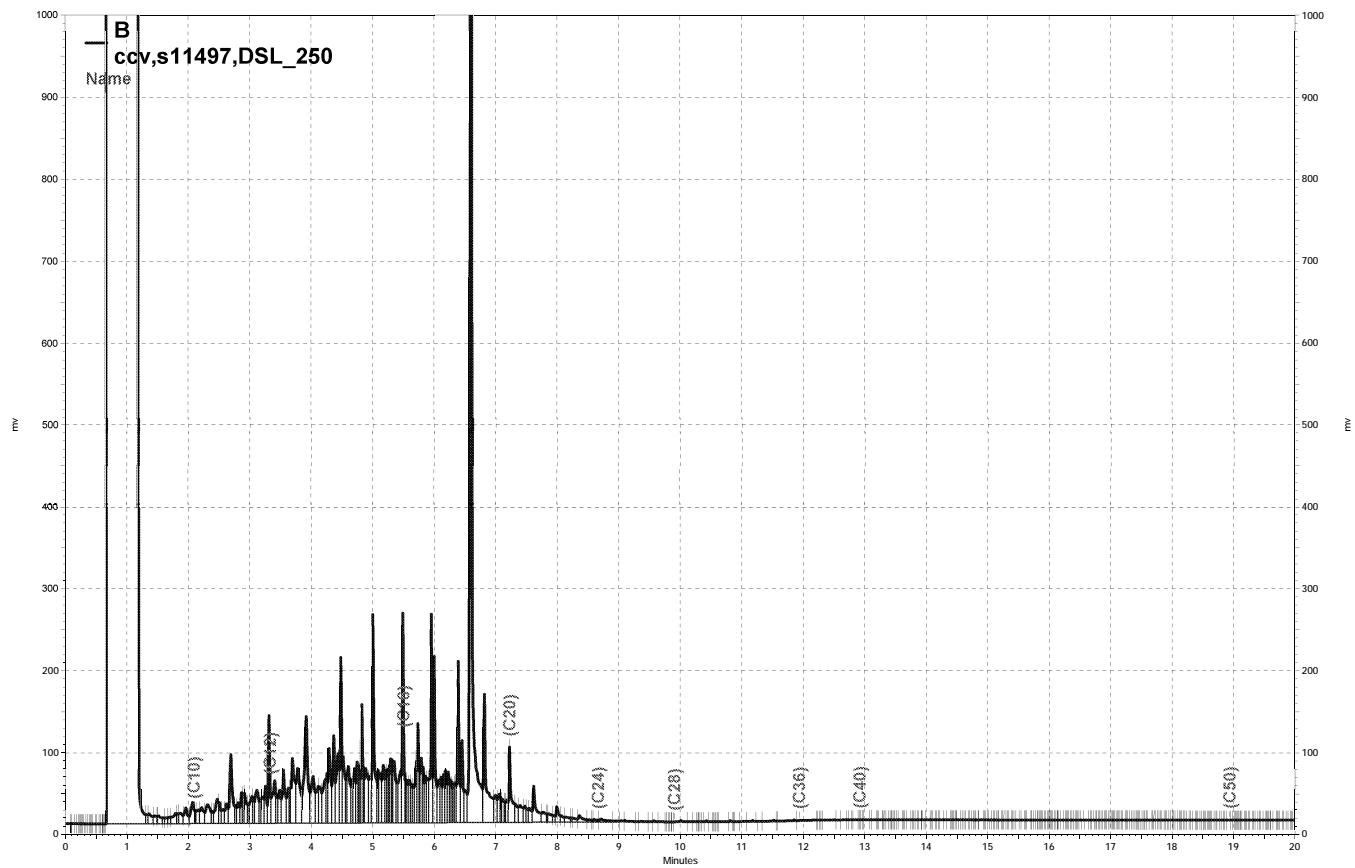
RPD= Relative Percent Difference

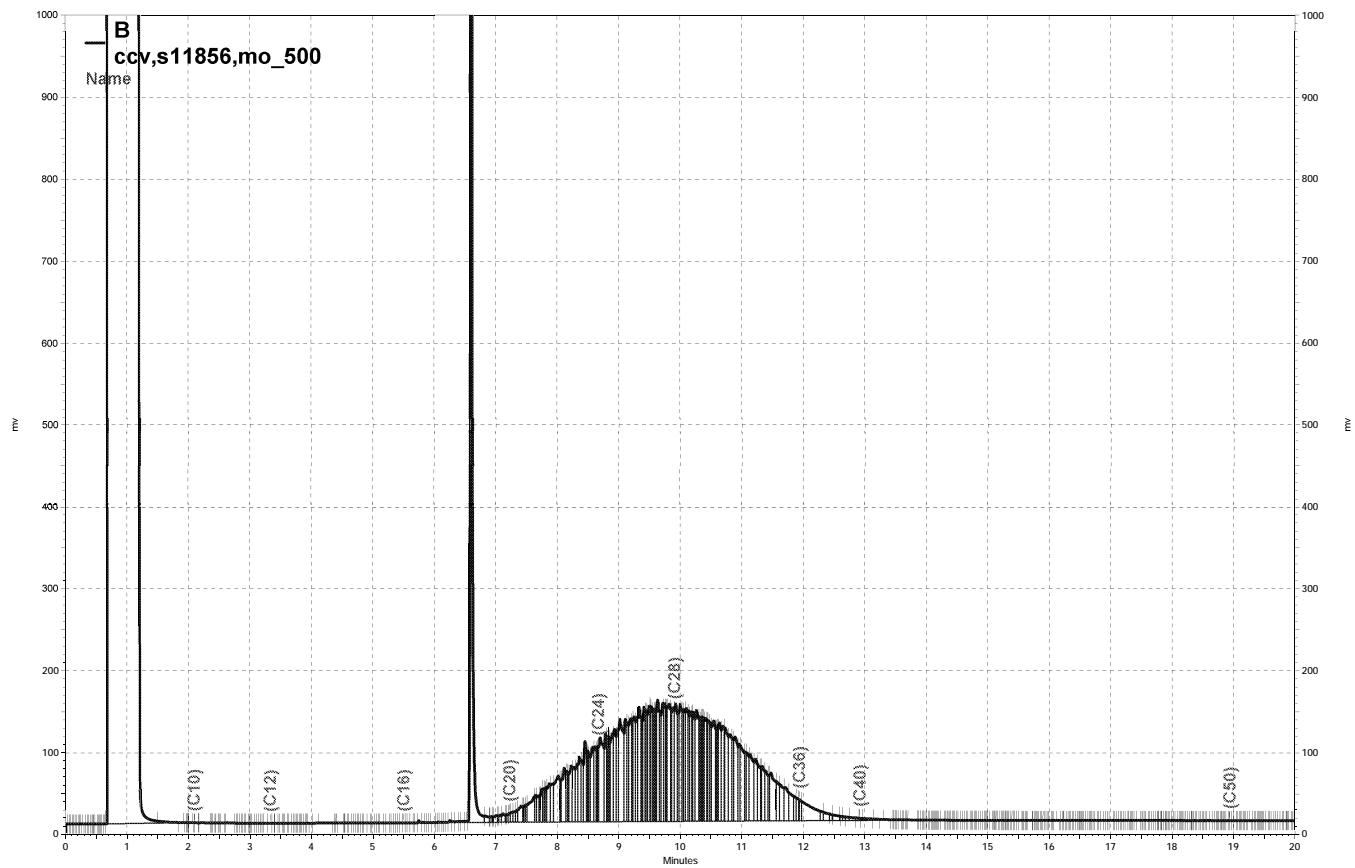
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52.0



— \\Lims\\gdrive\\ezchrom\\Projects\\GC15B\\Data\\110b023, B





— \\Lims\\gdrive\\ezchrom\\Projects\\GC15B\\Data\\110b013, B

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 229141813001
 Units : mg/L

Name : DSL_098
 Date : 08-APR-2009 20:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	098_016	229141813016	DSL_10	08-APR-2009 20:05	S10988
L2	098_017	229141813017	DSL_100	08-APR-2009 20:34	S10989
L3	098_018	229141813018	DSL_500	08-APR-2009 21:03	S10990
L4	098_019	229141813019	DSL_1000	08-APR-2009 21:32	S10991
L5	098_020	229141813020	DSL_5000	08-APR-2009 22:00	S10987
L6	098_021	229141813021	DSL_7500	08-APR-2009 22:29	S10992

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	50995	60376	66599	58525	58005	58141	AVRG		1.70E-5		58773	9	0.995	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-13	100.0	3	500.0	13	1000	0	5000	-1	7500	-1

SFK 04/09/09 : Corrected automatically drawn baseline for L1, L3, and L6.

Analyst: SFK

Date: 04/09/09

Reviewer: CP

Date: 04/09/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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229141813001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 GCSV Water
EPA 8015B

Inst : GC14B Name : DSL_098
Calnum : 229141813001 Cal Date : 08-APR-2009

ICV 229141813023 (098_023 08-APR-2009) stds: S11261

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	58773	56284	500.0	478.8	mg/L	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 229141813005
 Units : mg/L

Name : BOTHSURR_098
 Date : 09-APR-2009 00:53
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	098_026	229141813026	HEX OTP_5	09-APR-2009 00:53	S11524
L2	098_027	229141813027	HEX OTP_10	09-APR-2009 01:22	S11525
L3	098_028	229141813028	HEX OTP_25	09-APR-2009 01:51	S11526
L4	098_029	229141813029	HEX OTP_50	09-APR-2009 02:19	S11527
L5	098_030	229141813030	HEX OTP_100	09-APR-2009 02:48	S11528
L6	098_031	229141813031	HEX OTP_200	09-APR-2009 03:17	S11529

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	61923	71383	71071	73171	72242	73739	AVRG		1.42E-5		70588	6	0.995	20		
Hexacosane	B	58668	58982	60474	64853	61191		AVRG		1.64E-5		60834	4	0.995	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	B	5.000	-12	10.00	1	25.00	1	50.00	4	100.0	2	200.0	4
Hexacosane	B	5.000	-4	10.00	-3	25.00	-1	50.00	7	100.0	1		

SFK 04/09/09 : Corrected automatically drawn baseline for L5 and L6. Dropped the high point for Hexacosane.

Analyst: SFK

Date: 04/09/09

Reviewer: CP

Date: 04/09/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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229141813005

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 229141813004
 Units : mg/L

Name : MO_098
 Date : 09-APR-2009 04:14
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	098_033	229141813033	MO_50	09-APR-2009 04:14	S11818
L2	098_034	229141813034	MO_250	09-APR-2009 04:43	S11813
L3	098_035	229141813035	MO_500	09-APR-2009 05:12	S11814
L4	098_036	229141813036	MO_1000	09-APR-2009 05:41	S11815
L5	098_037	229141813037	MO_5000	09-APR-2009 06:10	S11816
L6	098_038	229141813038	MO_7500	09-APR-2009 06:38	S11817

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	53088	50579	49573	45149	39305	36967	AVRG		2.18E-5		45777	14	0.995	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	16	250.0	10	500.0	8	1000	-1	5000	-14	7500	-19

SFK 04/09/09 : Corrected automatically drawn baseline for L6. High point dropped for ranges C28-C36 and C28-C40 for %RSD.

Analyst: SFK

Date: 04/09/09

Reviewer: CP

Date: 04/09/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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229141813004

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 169127543005
 Units : mg/L

Name : DSL 088
 Date : 29-MAR-2009 16:04
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	40046	52542	58368	54905	53310	54420	AVRG		1.91E-5		52265	12	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	-23	100.0	1	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT

Date: 04/01/09

Reviewer: ATL

Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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169127543005

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 GCSV Water
EPA 8015B

Inst : GC15B Name : DSL 088
Calnum : 169127543005 Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	52265	53727	500.0	514.0	mg/L	3	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 169127543003
 Units : mg/L

Name : HEXOTP 088
 Date : 30-MAR-2009 00:03
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b023	169127543023	HEXOTP_5	30-MAR-2009 00:03	S11524
L2	088b024	169127543024	HEXOTP_10	30-MAR-2009 00:31	S11525
L3	088b025	169127543025	HEXOTP_25	30-MAR-2009 00:59	S11526
L4	088b026	169127543026	HEXOTP_50	30-MAR-2009 01:27	S11708
L5	088b027	169127543027	HEXOTP_100	30-MAR-2009 01:55	S11528

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
o-Terphenyl	56397	65220	66082	66641	66237	AVRG		1.56E-5		64115	7	0.995	20		
Hexacosane	47089	49021	53155	56095	53629	AVRG		1.93E-5		51798	7	0.995	20		

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	5.000	-12	10.00	2	25.00	3	50.00	4	100.0	3
Hexacosane	5.000	-9	10.00	-5	25.00	3	50.00	8	100.0	4

DNT 04/01/09 : High point not used because RSD was out for Hexacosane.

Analyst: DNT

Date: 04/01/09

Reviewer: ATL

Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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169127543003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 169128985002
 Units : mg/L

Name : MO_089
 Date : 30-MAR-2009 19:42
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	089b012	169128985012	MO_50	30-MAR-2009 19:42	S10563
L2	089b013	169128985013	MO_250	30-MAR-2009 20:11	S10565
L3	089b014	169128985014	MO_500	30-MAR-2009 20:39	S10564
L4	089b015	169128985015	MO_1000	30-MAR-2009 21:07	S10566
L5	089b016	169128985016	MO_5000	30-MAR-2009 21:36	S10567

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	56413	50633	47299	44286	32039	AVRG		2.17E-5		46134	20	0.995	20		

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	50.00	22	250.0	10	500.0	3	1000	-4	5000	-31

JDG 03/31/09 : high point dropped for failing %rsd. Ranges c28-c36 and c28-c40 will not be used.

JDG 03/31/09 : MO_50 through MO_5000: corrected automatically drawn baseline.

Analyst: JDG

Date: 03/31/09

Reviewer: ATL

Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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169128985002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 179150420002
 Units : mg/L

Name : DSL_104
 Date : 14-APR-2009 20:09
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	104a020	179150420020	DSL_10	14-APR-2009 20:09	S10988
L2	104a021	179150420021	DSL_100	14-APR-2009 20:37	S10989
L3	104a022	179150420022	DSL_500	14-APR-2009 21:04	S10987 (10X)
L4	104a023	179150420023	DSL_1000	14-APR-2009 21:32	S10991
L5	104a024	179150420024	DSL_5000	14-APR-2009 22:00	S10987
L6	104a025	179150420025	DSL_7500	14-APR-2009 22:27	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	59891	64696	62713	63568	63839	65016	AVRG		1.58E-5		63287	3	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	-5	100.0	2	500.0	-1	1000	0	5000	1	7500	3

JDG 04/15/09 : DSL_100: integrated fuel hump.

Analyst: JDG

Date: 04/15/09

Reviewer: ATL

Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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179150420002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Name : DSL_104
Calnum : 179150420002 Cal Date : 14-APR-2009

ICV 179150420027 (104a027 14-APR-2009) stds: S11498

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	63287	59696	500.0	471.6	mg/L	-6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 179150420003
 Units : mg/L

Name : MO_104
 Date : 15-APR-2009 00:45
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	104a030	179150420030	MO_50	15-APR-2009 00:45	S11818
L2	104a031	179150420031	MO_250	15-APR-2009 01:12	S11813
L3	104a032	179150420032	MO_500	15-APR-2009 01:40	S11814
L4	104a033	179150420033	MO_1000	15-APR-2009 02:07	S11815
L5	104a034	179150420034	MO_5000	15-APR-2009 02:34	S11816
L6	104a035	179150420035	MO_7500	15-APR-2009 03:02	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	50112	53985	56043	54843	54394	52887	AVRG		1.86E-5		53711	4	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.00	-7	250.0	1	500.0	4	1000	2	5000	1	7500	-2

JDG 04/15/09 : MO_50,250,500,5000: integrated fuel hump.

Analyst: JDG

Date: 04/15/09

Reviewer: ATL

Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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179150420003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 179163401001
 Units : mg/L

Name : HEXOTP_113
 Date : 23-APR-2009 12:43
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	113a004	179163401004	HEXOTP_5	23-APR-2009 12:43	S11524
L2	113a005	179163401005	HEXOTP_10	23-APR-2009 13:10	S11525
L3	113a006	179163401006	HEXOTP_25	23-APR-2009 13:37	S11526
L4	113a007	179163401007	HEXOTP_50	23-APR-2009 14:05	S11708
L5	113a008	179163401008	HEXOTP_100	23-APR-2009 14:32	S11528
L6	113a009	179163401009	HEXOTP_200	23-APR-2009 15:00	S11529

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	MnR^2	MxRSD	Flg
o-Terphenyl	74653	82424	76894	83684	82944	86006	AVRG		1.23E-5		81101	5	0.995	20	
Hexacosane	65985	63370	61388	68591	59959	58970	AVRG		1.59E-5		63044	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-8	10.00	2	25.00	-5	50.00	3	100.0	2	200.0	6
Hexacosane	5.000	5	10.00	1	25.00	-3	50.00	9	100.0	-5	200.0	-6

DNT 04/23/09 : Levels 1, 5, and 6 were manually integrated for their surrogate peaks.

DNT 04/23/09 : This ICAL's method was updated from Level 4's retention times.

Analyst: DNT

Date: 04/23/09

Reviewer: ATL

Date: 04/24/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

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179163401001

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 229159190038 File : 110_038 Time : 21-APR-2009 07:27
Standards: S11498

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	229141813001	08-APR-2009	58773	54591	500.0	464.4	mg/L	-7	15	
o-Terphenyl	B	229141813005	09-APR-2009	70588	63833	50.00	45.21	mg/L	-10	15	

JDG 04/21/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229159190042 File : 110_042 Time : 21-APR-2009 09:21
Standards: S11911

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	229141813004	09-APR-2009	45777	51891	500.0	566.8	mg/L	13	15	
o-Terphenyl	B	229141813005	09-APR-2009	70588	74787	100.0	105.9	mg/L	6	15	
Hexacosane	B	229141813005	09-APR-2009	60834	69544	50.00	57.16	mg/L	14	15	

JDG 04/21/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 04/21/09 Reviewer: SFK Date: 04/21/09
Page 1 of 1 229159190042

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 229159190052 File : 110_052 Time : 21-APR-2009 14:23
Standards: S11499

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	229141813001	08-APR-2009	58773	54475	1000	926.9	mg/L	-7	15	
o-Terphenyl	B	229141813005	09-APR-2009	70588	68031	50.00	48.19	mg/L	-4	15	

DNT 04/21/09 : Corrected automatically drawn baseline .

DNT: 04/21/09 TFB: 04/21/09 ATL: 04/21/09

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229159190052

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229159190053 File : 110_053 Time : 21-APR-2009 14:52
Standards: S11911

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	229141813004	09-APR-2009	45777	50532	500.0	551.9	mg/L	10	15	
o-Terphenyl	B	229141813005	09-APR-2009	70588	73184	100.0	103.7	mg/L	4	15	
Hexacosane	B	229141813005	09-APR-2009	60834	67118	50.00	55.16	mg/L	10	15	

DNT 04/21/09 : Manually integrated fuel hump.

Analyst: DNT Date: 04/21/09 Reviewer: TFB Date: 04/21/09
Page 1 of 1 229159190053

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169158908012 File : 110b012 Time : 20-APR-2009 14:08
Standards: S11497

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	169127543005	29-MAR-2009	52265	56969	250.0	272.5	mg/L	9	15	
o-Terphenyl	169127543003	30-MAR-2009	64115	67954	50.00	52.99	mg/L	6	15	

JDG 04/20/09 [o-Terphenyl B]: Separated from coeluting peak.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169158908013 File : 110b013 Time : 20-APR-2009 14:40
Standards: S11856

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	169128985002	30-MAR-2009	46134	39498	500.0	428.1	mg/L	-14	15	
o-Terphenyl	169127543003	30-MAR-2009	64115	68521	50.00	53.44	mg/L	7	15	

JDG 04/20/09 : Manually integrated fuel hump.

JDG: 04/20/09 TFB: 04/20/09 ATL: 04/21/09

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169158908013

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169158908028 File : 110b028 Time : 20-APR-2009 22:24
Standards: S11498

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	169127543005	29-MAR-2009	52265	54689	500.0	523.2	mg/L	5	15	
o-Terphenyl	169127543003	30-MAR-2009	64115	70408	50.00	54.91	mg/L	10	15	

JDG 04/21/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

JDG: 04/21/09 DNT: 04/21/09 ATL: 04/21/09

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169158908028

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169158908029 File : 110b029 Time : 20-APR-2009 22:52
Standards: S11911

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	169128985002	30-MAR-2009	46134	45885	500.0	497.3	mg/L	-1	15	
o-Terphenyl	169127543003	30-MAR-2009	64115	72794	100.0	113.5	mg/L	14	15	>LR ***
Hexacosane	169127543003	30-MAR-2009	51798	67116	50.00	64.79	mg/L	30	15	c+

JDG 04/21/09 : s11911,mo_500

DNT 04/21/09 : OTP not used.

JDG: 04/21/09 DNT: 04/21/09 ATL: 04/21/09

+ = high bias >LR = overrange c = CCV

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169158908029

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 179167918022 File : 116a022 Time : 26-APR-2009 22:12
Standards: S11497

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	179150420002	14-APR-2009	63287	62274	250.0	246.0	mg/L	-2	15	
o-Terphenyl	179163401001	23-APR-2009	81101	79782	50.00	49.19	mg/L	-2	15	

JDG 04/28/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 04/28/09 Reviewer: ATL Date: 04/28/09
Page 1 of 1 179167918022

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179167918024 File : 116a024 Time : 26-APR-2009 23:07
Standards: S11948

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	179150420003	15-APR-2009	53711	53913	500.0	501.9	mg/L	0	15	
o-Terphenyl	179163401001	23-APR-2009	81101	82003	50.00	50.56	mg/L	1	15	
Hexacosane	179163401001	23-APR-2009	63044	73171	50.00	58.03	mg/L	16	15	c+

JDG 04/28/09 [Hexacosane A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 04/28/09 Reviewer: ATL Date: 04/28/09

+high bias c=CCV

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179167918024

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 179167918037 File : 116a037 Time : 27-APR-2009 05:04
Standards: S11498

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	179150420002	14-APR-2009	63287	63589	500.0	502.4	mg/L	0	15	
o-Terphenyl	179163401001	23-APR-2009	81101	85855	50.00	52.93	mg/L	6	15	

JDG 04/28/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 04/28/09 Reviewer: ATL Date: 04/28/09
Page 1 of 1 179167918037

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 179167918040 File : 116a040 Time : 27-APR-2009 06:26
 Standards: S11947

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	179150420003	15-APR-2009	53711	57448	500.0	534.8	mg/L	7	15	
o-Terphenyl	179163401001	23-APR-2009	81101	86486	50.00	53.32	mg/L	7	15	
Hexacosane	179163401001	23-APR-2009	63044	77750	50.00	61.66	mg/L	23	15	c+

Analyst: JDG Date: 04/28/09 Reviewer: ATL Date: 04/28/09

+high bias c=CCV

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179167918040

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
Seqnum : 179168983003 File : 117a003 Time : 27-APR-2009 09:17
Standards: S11499

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	179150420002	14-APR-2009	63287	66109	1000	1045	mg/L	4	15	
o-Terphenyl	179163401001	23-APR-2009	81101	91793	50.00	56.59	mg/L	13	15	

JDG 04/27/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 04/27/09 Reviewer: JDG Date: 04/27/09
Page 1 of 1 179168983003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179168983004 File : 117a004 Time : 27-APR-2009 09:45
Standards: S11948

Analyte	Cal	Caldate	Avg			Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF							
Motor Oil C24-C36	179150420003	15-APR-2009	53711	58937	500.0	548.7	mg/L	10	15		
o-Terphenyl	179163401001	23-APR-2009	81101	89604	50.00	55.24	mg/L	10	15		
Hexacosane	179163401001	23-APR-2009	63044	80617	50.00	63.94	mg/L	28	15	c+	

JDG 04/27/09 : Manually integrated fuel hump.

Analyst: TFB Date: 04/27/09 Reviewer: JDG Date: 04/27/09

+high bias c=CCV

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179168983004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : HEXOTP_50 IDF : 1.0
Seqnum : 179168983012 File : 117a012 Time : 27-APR-2009 13:40
Cal : 179163401001 Caldate : 23-APR-2009
Standards: S11708

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Flags
o-Terphenyl	81101	78483	50.00	48.39	mg/L	-3	15		
Hexacosane	63044	63744	50.00	50.56	mg/L	1	15		

TFB: 04/27/09 * JDG: 04/27/09 ATL: 04/27/09

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179168983012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 179168983014 File : 117a014 Time : 27-APR-2009 14:34
 Standards: S11948

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	179150420003	15-APR-2009	53711	55233	500.0	514.2	mg/L	3	15	
o-Terphenyl	179163401001	23-APR-2009	81101	84632	50.00	52.18	mg/L	4	15	
Hexacosane	179163401001	23-APR-2009	63044	76270	50.00	60.49	mg/L	21	15	c+

TFB: 04/27/09 * JDG: 04/27/09 ATL: 04/27/09

+high bias c=CCV

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179168983014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 179168983015 File : 117a015 Time : 27-APR-2009 15:07
Standards: S11497

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	179150420002	14-APR-2009	63287	63962	250.0	252.7	mg/L	1	15	
o-Terphenyl	179163401001	23-APR-2009	81101	80477	50.00	49.62	mg/L	-1	15	

JDG 04/27/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 04/27/09 Reviewer: ATL Date: 04/27/09
Page 1 of 1 179168983015

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B
 Method : EPA 8015B

Begun : 03/29/09 13:43
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	088b001	X	IB			03/29/09 13:43	1.0	
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1
003	088b003	X	IB			03/29/09 14:40	1.0	
004	088b004	X	IB			03/29/09 15:08	1.0	
005	088b005	IB	CALIB			03/29/09 15:36	1.0	
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7
012	088b012	IB	CALIB			03/29/09 18:54	1.0	
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8
014	088b014	X	ICV			03/29/09 19:50	1.0	8
015	088b015	IB	CALIB			03/29/09 20:18	1.0	
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14
022	088b022	IB	CALIB			03/29/09 23:35	1.0	
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20
029	088b029	IB	CALIB			03/30/09 02:51	1.0	
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26
036	088b036	IB	CALIB			03/30/09 06:09	1.0	
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32
043	088b043	IB	CALIB			03/30/09 09:25	1.0	
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38
050	088b050	IB	CALIB			03/30/09 12:41	1.0	
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09
Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564
12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750
23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515
34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169128985

Instrument : GC15B
 Method : EPA 8015B

Begun : 03/30/09 13:45
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	089b001	IB	CALIB			03/30/09 13:45	1.0	
002	089b002	ICAL	HYFL_50			03/30/09 14:13	1.0	1
003	089b003	ICAL	HYFL_250			03/30/09 14:41	1.0	2
004	089b004	ICAL	HYFL_500			03/30/09 15:09	1.0	3
005	089b005	ICAL	HYFL_1000			03/30/09 15:37	1.0	4
006	089b006	ICAL	HYFL_5000			03/30/09 16:04	1.0	5
007	089b007	ICAL	HYFL_7500			03/30/09 16:32	1.0	6
008	089b008	IB	CALIB			03/30/09 17:00	1.0	
009	089b009	X	C8-C50			03/30/09 17:28	1.0	7
010	089b010	X	IB			03/30/09 17:55	1.0	
011	089b011	IB	CALIB			03/30/09 19:15	1.0	
012	089b012	ICAL	MO_50			03/30/09 19:42	1.0	8
013	089b013	ICAL	MO_250			03/30/09 20:11	1.0	9
014	089b014	ICAL	MO_500			03/30/09 20:39	1.0	10
015	089b015	ICAL	MO_1000			03/30/09 21:07	1.0	11
016	089b016	ICAL	MO_5000			03/30/09 21:36	1.0	12
017	089b017	X	MO_7500			03/30/09 22:04	1.0	13
018	089b018	IB	CALIB			03/30/09 22:32	1.0	
019	089b019	CMARKER	C8-C50			03/30/09 23:00	1.0	7

JDG 03/31/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

Analyst: JDG Date: 03/31/09 Reviewer: ATL Date: 03/31/09

Standards used: 1=S11069 2=S11070 3=S11071 4=S11072 5=S11073 6=S11074 7=S11248 8=S10563 9=S10565 10=S10564 11=S10566

12=S10567 13=S10568

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169158908

Instrument : GC15B Begun : 04/20/09 08:28
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	110b001	X	PRIMER				04/20/09 08:28	1.0		
002	110b002	X	CMARKER				04/20/09 08:56	1.0	1	
003	110b003	CCV	DSL_250				04/20/09 09:24	1.0	2	
004	110b004	SAMPLE	211465-001		Soil	150104	04/20/09 10:01	10.0		
005	110b005	CCV	DSL_1000				04/20/09 10:29	1.0	3	
006	110b006	CCV	MO_500				04/20/09 10:57	1.0	4	
007	110b007	MS	QC492345		Soil	150094	04/20/09 11:48	1.0		
008	110b008	MSD	QC492346		Soil	150094	04/20/09 12:16	1.0		
009	110b009	SAMPLE	211478-006		Soil	150041	04/20/09 12:44	5.0		
010	110b010	X	IB				04/20/09 13:12	1.0		
011	110b011	BLANK	QC492123		Water	150043	04/20/09 13:40	1.0		
012	110b012	CCV	DSL_250				04/20/09 14:08	1.0	2	
013	110b013	CCV	MO_500				04/20/09 14:40	1.0	4	
014	110b014	CCV	JET_250				04/20/09 15:09	1.0	5	
015	110b015	X	CCV				04/20/09 15:49	1.0	6	1:PHENO=110
016	110b016	SAMPLE	211224-001		Water	149857	04/20/09 16:18	1.0		
017	110b017	SAMPLE	211288-003		Soil	149909	04/20/09 16:55	10.0		
018	110b018	SAMPLE	211288-017		Soil	149910	04/20/09 17:23	1.0		
019	110b019	SAMPLE	211288-018		Soil	149910	04/20/09 17:51	1.0		
020	110b020	SAMPLE	211452-001		Water	150043	04/20/09 18:31	1.0		
021	110b021	SAMPLE	211408-007	S	Soil	150019	04/20/09 19:09	1.0		
022	110b022	SAMPLE	211416-001	S	Water	149994	04/20/09 19:36	1.0		
023	110b023	SAMPLE	211416-002	S	Water	149994	04/20/09 20:04	1.0		
024	110b024	X	IB				04/20/09 20:33	1.0		
025	110b025	BLANK	QC492499		Soil	150136	04/20/09 21:01	1.0		
026	110b026	LCS	QC492500		Soil	150136	04/20/09 21:28	1.0		
027	110b027	X	CMARKER				04/20/09 21:56	1.0	1	
028	110b028	CCV	DSL_500				04/20/09 22:24	1.0	7	
029	110b029	CCV	MO_500				04/20/09 22:52	1.0	6	1:PHENO=110
030	110b030	X	CCV				04/20/09 23:20	1.0	7	
031	110b031	X	CCV				04/20/09 23:47	1.0	4	
032	110b032	SAMPLE	211556-003		Soil	150136	04/21/09 00:15	5.0		
033	110b033	SAMPLE	211556-004		Soil	150136	04/21/09 00:43	5.0		
034	110b034	MSS	211556-005		Soil	150136	04/21/09 01:11	50.0		
035	110b035	SAMPLE	211556-006		Soil	150136	04/21/09 01:39	5.0		
036	110b036	SAMPLE	211556-001		Soil	150136	04/21/09 02:07	1.0		
037	110b037	SAMPLE	211556-002		Soil	150136	04/21/09 02:35	1.0		
038	110b038	X	IB				04/21/09 03:03	1.0		
039	110b039	MSS	211364-004	S	Water	149994	04/21/09 03:32	1.0		
040	110b040	MS	QC491947	S	Water	149994	04/21/09 04:00	1.0		
041	110b041	MSD	QC491948	S	Water	149994	04/21/09 04:28	1.0		
042	110b042	SAMPLE	211361-001	S	Water	149994	04/21/09 04:56	1.0		
043	110b043	CCV	DSL_1000				04/21/09 05:25	1.0	3	
044	110b044	CCV	MO_500				04/21/09 05:53	1.0	6	1:PHENO=110
045	110b045	X	CCV				04/21/09 06:21	1.0	3	
046	110b046	X	CCV				04/21/09 06:50	1.0	4	

DNT 04/20/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 8.

JDG 04/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 9 through 46.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169158908

Instrument : GC15B Begun : 04/20/09 08:28
Method : EPA 8015B SOP Version : TEH_rv13

Standards used: 1=S11248 2=S11497 3=S11499 4=S11856 5=S11462 6=S11911 7=S11498
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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179150420

Instrument : GC17A
 Method : EPA 8015B

Begun : 04/14/09 11:00
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	104a001	X	PRIMER			04/14/09 11:00	1.0	
002	104a002	IB	CALIB			04/14/09 11:27	1.0	
003	104a003	ICAL	HEXOTP_5			04/14/09 11:55	1.0	1
004	104a004	ICAL	HEXOTP_10			04/14/09 12:22	1.0	2
005	104a005	ICAL	HEXOTP_25			04/14/09 12:50	1.0	3
006	104a006	ICAL	HEXOTP_50			04/14/09 13:17	1.0	4
007	104a007	ICAL	HEXOTP_100			04/14/09 13:45	1.0	5
008	104a008	ICAL	HEXOTP_200			04/14/09 14:12	1.0	6
009	104a009	IB	CALIB			04/14/09 14:39	1.0	
010	104a010	X	IB			04/14/09 15:10	1.0	
011	104a011	X	CMARKER			04/14/09 15:38	1.0	7
012	104a012	CCV	DSL_250			04/14/09 16:05	1.0	8
013	104a013	CCV	MO_500			04/14/09 16:33	1.0	9
014	104a014	CCV	HEXOTP_50			04/14/09 17:01	1.0	10
015	104a015	CCV	MO_500			04/14/09 17:45	1.0	9
016	104a016	X	IB			04/14/09 18:20	1.0	
017	104a017	X	IB			04/14/09 18:47	1.0	
018	104a018	X	IB			04/14/09 19:14	1.0	
019	104a019	IB	CALIB			04/14/09 19:42	1.0	
020	104a020	ICAL	DSL_10			04/14/09 20:09	1.0	11
021	104a021	ICAL	DSL_100			04/14/09 20:37	1.0	12
022	104a022	ICAL	DSL_500			04/14/09 21:04	1.0	13
023	104a023	ICAL	DSL_1000			04/14/09 21:32	1.0	14
024	104a024	ICAL	DSL_5000			04/14/09 22:00	1.0	13
025	104a025	ICAL	DSL_7500			04/14/09 22:27	1.0	15
026	104a026	IB	CALIB			04/14/09 22:55	1.0	
027	104a027	ICV	DSL_500			04/14/09 23:23	1.0	16
028	104a028	X	ICV			04/14/09 23:50	1.0	16
029	104a029	IB	CALIB			04/15/09 00:18	1.0	
030	104a030	ICAL	MO_50			04/15/09 00:45	1.0	17
031	104a031	ICAL	MO_250			04/15/09 01:12	1.0	18
032	104a032	ICAL	MO_500			04/15/09 01:40	1.0	19
033	104a033	ICAL	MO_1000			04/15/09 02:07	1.0	20
034	104a034	ICAL	MO_5000			04/15/09 02:34	1.0	21
035	104a035	ICAL	MO_7500			04/15/09 03:02	1.0	22
036	104a036	X	IB			04/15/09 03:29	1.0	
037	104a037	CMARKER	C8-C50			04/15/09 03:57	1.0	7
038	104a038	X	IB			04/15/09 04:24	1.0	

DNT 04/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 04/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 38.

Analyst: DNT Date: 04/14/09 Reviewer: CP Date: 04/14/09

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11248 8=S11497 9=S11856 10=S11709 11=S10988
 12=S10989 13=S10987 14=S10991 15=S10992 16=S11498 17=S11818 18=S11813 19=S11814 20=S11815 21=S11816 22=S11817

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179163401

Instrument : GC17A
 Method : EPA 8015B

Begun : 04/23/09 11:21
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	113a001	X	IB				04/23/09 11:21	1.0		
002	113a002	X	IB				04/23/09 11:48	1.0		
003	113a003	IB	CALIB				04/23/09 12:16	1.0		
004	113a004	ICAL	HEXOTP_5				04/23/09 12:43	1.0	1	
005	113a005	ICAL	HEXOTP_10				04/23/09 13:10	1.0	2	
006	113a006	ICAL	HEXOTP_25				04/23/09 13:37	1.0	3	
007	113a007	ICAL	HEXOTP_50				04/23/09 14:05	1.0	4	
008	113a008	ICAL	HEXOTP_100				04/23/09 14:32	1.0	5	
009	113a009	ICAL	HEXOTP_200				04/23/09 15:00	1.0	6	
010	113a010	IB	CALIB				04/23/09 15:27	1.0		
011	113a011	X	CMARKER				04/23/09 16:15	1.0	7	
012	113a012	CCV	DSL_250				04/23/09 16:43	1.0	8	
013	113a013	X	CCV				04/23/09 17:10	1.0	9	
014	113a014	CCV	JP5_250				04/23/09 17:37	1.0	10	
015	113a015	X	IB				04/23/09 18:05	1.0		
016	113a016	X	IB				04/23/09 18:32	1.0		
017	113a017	X	IB				04/23/09 18:59	1.0		
018	113a018	CCV	MO_500				04/23/09 19:52	1.0	9	
019	113a019	CCV	BUNK_500				04/23/09 20:33	1.0	11	
020	113a020	CCV	JET_250				04/23/09 21:01	1.0	12	
021	113a021	BLANK	QC492685	Soil	150182	04/23/09 21:50	1.0			
022	113a022	MSS	211374-017	Soil	150182	04/23/09 22:18	1.0			
023	113a023	SAMPLE	211469-003	Soil	150182	04/23/09 22:45	5.0			2:BUNKC:12-40=6000
024	113a024	SAMPLE	211469-001	Soil	150182	04/23/09 23:13	1.0			
025	113a025	SAMPLE	211469-002	Soil	150182	04/23/09 23:40	1.0			
026	113a026	SAMPLE	211469-004	Soil	150182	04/24/09 00:07	1.0			
027	113a027	MS	QC492687	Soil	150182	04/24/09 00:35	1.0			1:BUNKC:12-40=5000
028	113a028	MSD	QC492688	Soil	150182	04/24/09 01:02	1.0			2:BUNKC:12-40=7700
029	113a029	X	IB				04/24/09 01:29	1.0		
030	113a030	LCS	QC492686	S	Soil	150182	04/24/09 01:57	1.0		
031	113a031	SAMPLE	211469-005	Soil	150182	04/24/09 02:24	1.0			
032	113a032	CCV	DSL_500				04/24/09 02:51	1.0	13	
033	113a033	CCV	MO_500				04/24/09 03:19	1.0	9	
034	113a034	CCV	BUNK_500				04/24/09 03:46	1.0	11	
035	113a035	CCV	JET_250				04/24/09 04:13	1.0	12	
036	113a036	X	CCV				04/24/09 04:41	1.0	13	
037	113a037	X	CCV				04/24/09 05:08	1.0	9	
038	113a038	X	CCV				04/24/09 05:36	1.0	11	
039	113a039	X	CCV				04/24/09 06:03	1.0	12	

DNT 04/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 10.

JDG 04/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 39.

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11825 8=S11497 9=S11911 10=S11474 11=S11172
 12=S11462 13=S11498

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179167918

Instrument : GC17A
 Method : EPA 8015B

Begun : 04/26/09 14:38
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	116a001	X	IB				04/26/09 14:38	1.0		
002	116a002	X	CMARKER				04/26/09 15:05	1.0	1	
003	116a003	CCV	DSL_1000				04/26/09 15:32	1.0	2	
004	116a004	CCV	HEXOTP_50				04/26/09 16:00	1.0	3	
005	116a005	X	MO_500				04/26/09 16:28	1.0	4	
006	116a006	X	IB				04/26/09 18:14	1.0		
007	116a007	CCV	MO_500				04/26/09 20:37	1.0	5	
008	116a008	SAMPLE	211435-001		Soil	150104	04/26/09 21:16	5.0		2:BUNKC:12-40=17000
009	116a009	SAMPLE	211435-002		Soil	150104	04/26/09 21:43	25.0		2:BUNKC:12-40=14000
022	116a022	CCV	DSL_250				04/26/09 22:12	1.0	6	
023	116a023	CCV	HEXOTP_50				04/26/09 22:40	1.0	3	
024	116a024	CCV	MO_500				04/26/09 23:07	1.0	5	
025	116a025	SAMPLE	211416-001	S	Water	150274	04/26/09 23:34	1.0		
026	116a026	SAMPLE	211557-016	S	Soil	150222	04/27/09 00:02	1.0		
027	116a027	SAMPLE	211557-014	S	Soil	150222	04/27/09 00:29	1.0		
028	116a028	SAMPLE	211557-013	S	Soil	150222	04/27/09 00:57	1.0		
029	116a029	SAMPLE	211557-012	S	Soil	150222	04/27/09 01:24	1.0		
030	116a030	SAMPLE	211557-011	S	Soil	150222	04/27/09 01:52	1.0		
031	116a031	X	IB				04/27/09 02:19	1.0		
032	116a032	SAMPLE	211557-010	S	Soil	150222	04/27/09 02:47	1.0		
033	116a033	SAMPLE	211557-004	S	Soil	150222	04/27/09 03:14	1.0		
034	116a034	SAMPLE	211557-003	S	Soil	150222	04/27/09 03:41	1.0		
035	116a035	SAMPLE	211557-008	S	Soil	150222	04/27/09 04:09	1.0		
036	116a036	X	CMARKER				04/27/09 04:36	1.0	1	
037	116a037	CCV	DSL_500				04/27/09 05:04	1.0	7	
038	116a038	X	MO_500				04/27/09 05:31	1.0	4	
039	116a039	X	CCV				04/27/09 05:59	1.0	2	
040	116a040	CCV	MO_500				04/27/09 06:26	1.0	4	

JDG 04/27/09 : Vials 10-21 did not run.

JDG 04/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 04/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 22 through 40.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179168983

Instrument : GC17A
 Method : EPA 8015B

Begun : 04/27/09 08:23
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	117a001	X	IB				04/27/09 08:23	1.0		
002	117a002	X	CMARKER				04/27/09 08:50	1.0	1	
003	117a003	CCV	DSL_1000				04/27/09 09:17	1.0	2	
004	117a004	CCV	MO_500				04/27/09 09:45	1.0	3	
005	117a005	BLANK	QC493061	S	Water	150274	04/27/09 10:12	1.0		
006	117a006	BS	QC493062	S	Water	150274	04/27/09 10:40	1.0		
007	117a007	BSD	QC493063	S	Water	150274	04/27/09 11:07	1.0		
008	117a008	SAMPLE	211643-002	S	Water	150274	04/27/09 11:34	1.0		
009	117a009	SAMPLE	211643-001	S	Water	150274	04/27/09 12:02	3.0		16:BUNKC:12-40=52000
010	117a010	SAMPLE	211643-002		Water	150274	04/27/09 12:45	10.0		
011	117a011	SAMPLE	211643-001	S	Water	150274	04/27/09 13:12	10.0		2:BUNKC:12-40=16000
012	117a012	CCV	HEXOTP_50				04/27/09 13:40	1.0	4	
013	117a013	X	DSL_250				04/27/09 14:07	1.0	5	
014	117a014	CCV	MO_500				04/27/09 14:34	1.0	3	
015	117a015	CCV	DSL_250				04/27/09 15:07	1.0	5	
016	117a016	BLANK	QC492368		Soil	150104	04/27/09 16:25	1.0		
017	117a017	LCS	QC492369		Soil	150104	04/27/09 16:53	1.0		
018	117a018	X	IB				04/27/09 17:27	1.0		
019	117a019	SAMPLE	211435-001		Soil	150104	04/27/09 17:55	5.0		2:BUNKC:12-40=8400
020	117a020	SAMPLE	211435-002		Soil	150104	04/27/09 18:22	25.0		2:BUNKC:12-40=13000
021	117a021	X	IB				04/27/09 19:06	1.0		
022	117a022	SAMPLE	211575-004		Soil	150343	04/27/09 19:33	1.0		
023	117a023	SAMPLE	211575-005		Soil	150343	04/27/09 20:00	1.0		
024	117a024	SAMPLE	211578-003		Water	150190	04/27/09 20:28	1.0		
025	117a025	SAMPLE	211579-001		Water	150190	04/27/09 20:55	1.0		
026	117a026	SAMPLE	211579-002		Water	150190	04/27/09 21:22	1.0		
027	117a027	SAMPLE	211579-003		Water	150190	04/27/09 21:56	1.0		
028	117a028	X	CMARKER				04/27/09 22:24	1.0	1	
029	117a029	CCV	HEXOTP_50				04/27/09 22:51	1.0	4	
030	117a030	CCV	DSL_1000				04/27/09 23:19	1.0	2	
031	117a031	CCV	MO_500				04/27/09 23:46	1.0	3	
032	117a032	X	HEXOTP_50				04/28/09 00:14	1.0	4	
033	117a033	X	CCV				04/28/09 00:41	1.0	2	
034	117a034	X	CCV				04/28/09 01:08	1.0	3	
035	117a035	BLANK	QC493325		Water	150342	04/28/09 01:36	1.0		
036	117a036	MSS	211589-001		Water	150342	04/28/09 02:03	1.0		
037	117a037	MS	QC493327		Water	150342	04/28/09 02:31	1.0		
038	117a038	MSD	QC493328		Water	150342	04/28/09 02:58	1.0		
039	117a039	SAMPLE	211598-003	S	Water	150342	04/28/09 03:25	1.0		
040	117a040	SAMPLE	211598-004	S	Water	150342	04/28/09 03:53	1.0		
041	117a041	SAMPLE	211598-005	S	Water	150342	04/28/09 04:20	1.0		
042	117a042	CCV	DSL_250				04/28/09 04:48	1.0	5	
043	117a043	X	MO_500				04/28/09 05:15	1.0	3	
044	117a044	X	CCV				04/28/09 05:43	1.0	5	
045	117a045	CCV	MO_500				04/28/09 06:10	1.0	3	

JDG 04/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

JDG 04/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 18 through 45.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179168983

Instrument : GC17A Begun : 04/27/09 08:23
Method : EPA 8015B SOP Version : TEH_rv13

Standards used: 1=S11825 2=S11499 3=S11948 4=S11708 5=S11497

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229141813

Instrument : GC14B
 Method : EPA 8015B

Begun : 04/08/09 11:33
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	098_001	X	PRIMER			04/08/09 11:33	1.0	
002	098_002	X	IB			04/08/09 12:02	1.0	
003	098_003	X	CMARKER			04/08/09 12:31	1.0	1
004	098_004	CCV	DSL_1000			04/08/09 13:00	1.0	2
005	098_005	CCV	MO_500			04/08/09 13:30	1.0	3
006	098_006	CCV	DSL_1000			04/08/09 13:59	1.0	2
007	098_007	CCV	HEXOTP_50			04/08/09 14:29	1.0	4
008	098_008	CCV	DSL_250			04/08/09 14:58	1.0	5
009	098_009	CCV	MO_500			04/08/09 15:27	1.0	3
010	098_010	CCV	MO_500			04/08/09 15:57	1.0	6
011	098_011	X	IB			04/08/09 17:13	1.0	
012	098_012	X	IB			04/08/09 18:10	1.0	
013	098_013	X	IB			04/08/09 18:39	1.0	
014	098_014	X	IB			04/08/09 19:08	1.0	
015	098_015	IB	CALIB			04/08/09 19:36	1.0	
016	098_016	ICAL	DSL_10			04/08/09 20:05	1.0	7
017	098_017	ICAL	DSL_100			04/08/09 20:34	1.0	8
018	098_018	ICAL	DSL_500			04/08/09 21:03	1.0	9
019	098_019	ICAL	DSL_1000			04/08/09 21:32	1.0	10
020	098_020	ICAL	DSL_5000			04/08/09 22:00	1.0	11
021	098_021	ICAL	DSL_7500			04/08/09 22:29	1.0	12
022	098_022	X	IB			04/08/09 22:58	1.0	
023	098_023	ICV	DSL_500			04/08/09 23:26	1.0	13
024	098_024	X	ICV			04/08/09 23:55	1.0	13
025	098_025	IB	CALIB			04/09/09 00:24	1.0	
026	098_026	ICAL	HEX OTP_5			04/09/09 00:53	1.0	14
027	098_027	ICAL	HEX OTP_10			04/09/09 01:22	1.0	15
028	098_028	ICAL	HEX OTP_25			04/09/09 01:51	1.0	16
029	098_029	ICAL	HEX OTP_50			04/09/09 02:19	1.0	17
030	098_030	ICAL	HEX OTP_100			04/09/09 02:48	1.0	18
031	098_031	ICAL	HEX OTP_200			04/09/09 03:17	1.0	19
032	098_032	IB	CALIB			04/09/09 03:46	1.0	
033	098_033	ICAL	MO_50			04/09/09 04:14	1.0	20
034	098_034	ICAL	MO_250			04/09/09 04:43	1.0	21
035	098_035	ICAL	MO_500			04/09/09 05:12	1.0	22
036	098_036	ICAL	MO_1000			04/09/09 05:41	1.0	23
037	098_037	ICAL	MO_5000			04/09/09 06:10	1.0	24
038	098_038	ICAL	MO_7500			04/09/09 06:38	1.0	25
039	098_039	IB	CALIB			04/09/09 07:06	1.0	
040	098_040	CMARKER	C8-C50			04/09/09 07:34	1.0	1
041	098_041	X	IB			04/09/09 08:03	1.0	

SFK 04/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

Analyst: SFK Date: 04/09/09 Reviewer: CP Date: 04/09/09

Standards used: 1=S11248 2=S11499 3=S11802 4=S11709 5=S11260 6=S10564 7=S10988 8=S10989 9=S10990 10=S10991 11=S10987

12=S10992 13=S11261 14=S11524 15=S11525 16=S11526 17=S11527 18=S11528 19=S11529 20=S11818 21=S11813 22=S11814

23=S11815 24=S11816 25=S11817

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229159190

Instrument : GC14B
 Method : EPA 8015B

Begun : 04/20/09 13:10
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	110_001	X	PRIMER				04/20/09 13:10	1.0		
002	110_002	X	IB				04/20/09 13:39	1.0		
003	110_003	X	CMARKER				04/20/09 14:08	1.0	1	
004	110_004	CCV	DSL_500				04/20/09 14:37	1.0	2	
005	110_005	CCV	MO_500				04/20/09 15:07	1.0	3	
006	110_006	X	MO_500				04/20/09 15:36	1.0	4	
007	110_007	CCV	HEXOTP_50				04/20/09 16:16	1.0	5	
008	110_008	SAMPLE	211314-001	S	Water	149907	04/20/09 17:01	1.0		
009	110_009	MS	QC491576		Water	149907	04/20/09 17:30	5.0		
010	110_010	MSD	QC491577		Water	149907	04/20/09 18:00	5.0		
011	110_011	X	IB				04/20/09 18:28	1.0		
012	110_012	BLANK	QC491574	S	Water	149907	04/20/09 18:57	1.0		
013	110_013	MS	QC491375	S	Water	149857	04/20/09 19:26	1.0		
014	110_014	MSD	QC491376	S	Water	149857	04/20/09 19:54	1.0		
015	110_015	SAMPLE	211278-002		Soil	149869	04/20/09 20:23	10.0		1:BUNKC:12-40=5200
016	110_016	SAMPLE	211326-010	S	Soil	149869	04/20/09 20:51	10.0		1:BUNKC:12-40=20000
017	110_017	X	IB				04/20/09 21:20	1.0		
018	110_018	BLANK	QC492030	S	Soil	150019	04/20/09 21:49	1.0		
019	110_019	SAMPLE	211326-007	S	Soil	149869	04/20/09 22:17	1.0		
020	110_020	CCV	DSL_1000				04/20/09 22:45	1.0	6	
021	110_021	X	CCV				04/20/09 23:14	1.0	4	
022	110_022	CCV	HEXOTP_50				04/20/09 23:42	1.0	5	
023	110_023	X	CCV				04/21/09 00:11	1.0	6	
024	110_024	CCV	MO_500				04/21/09 00:40	1.0	4	
025	110_025	X	CCV				04/21/09 01:08	1.0	5	
026	110_026	LCS	QC492031	S	Soil	150019	04/21/09 01:37	1.0		
027	110_027	BLANK	QC492030		Soil	150019	04/21/09 02:06	1.0		
028	110_028	MSS	211408-006	S	Soil	150019	04/21/09 02:35	1.0		1:BUNKC:12-40=6000
029	110_029	MS	QC492032	S	Soil	150019	04/21/09 03:03	1.0		1:BUNKC:12-40=13000
030	110_030	MSD	QC492033	S	Soil	150019	04/21/09 03:32	1.0		1:BUNKC:12-40=8400
031	110_031	X	IB				04/21/09 04:01	1.0		
032	110_032	SAMPLE	211148-002		Water	149667	04/21/09 04:30	1.0		
033	110_033	SAMPLE	211148-001		Water	149667	04/21/09 05:00	1.0		
034	110_034	BLANK	QC491574		Water	149907	04/21/09 05:29	1.0		
035	110_035	MSS	211145-006		Water	149907	04/21/09 05:58	5.0		
036	110_036	SAMPLE	211314-001	S	Water	149907	04/21/09 06:28	1.0		
037	110_037	X	CMARKER				04/21/09 06:57	1.0	1	
038	110_038	CCV	DSL_500				04/21/09 07:27	1.0	2	
039	110_039	X	CCV				04/21/09 07:55	1.0	4	
040	110_040	CCV	HEXOTP_50				04/21/09 08:24	1.0	5	
041	110_041	X	CCV				04/21/09 08:52	1.0	2	
042	110_042	CCV	MO_500				04/21/09 09:21	1.0	4	
043	110_043	X	CCV				04/21/09 09:50	1.0	5	
044	110_044	SAMPLE	211314-001		Water	149907	04/21/09 10:18	1.0		
045	110_045	SAMPLE	211148-002		Water	149667	04/21/09 10:55	1.0		
046	110_046	MSS	211364-004	S	Water	149994	04/21/09 11:26	1.0		
047	110_047	BLANK	QC491945	S	Water	149994	04/21/09 11:54	1.0		
048	110_048	LCS	QC491946	S	Water	149994	04/21/09 12:24	1.0		
049	110_049	MS	QC491947	S	Water	149994	04/21/09 12:53	1.0		
050	110_050	MSD	QC491948	S	Water	149994	04/21/09 13:22	1.0		
051	110_051	BLANK	QC491945		Water	149994	04/21/09 13:54	1.0		
052	110_052	CCV	DSL_1000				04/21/09 14:23	1.0	6	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229159190

Instrument : GC14B Begun : 04/20/09 13:10
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	110_053	CCV	MO_500				04/21/09 14:52	1.0	4	

DNT 04/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 53.

Standards used: 1=S11248 2=S11498 3=S11856 4=S11911 5=S11708 6=S11499

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SAMPLE PREPARATION SUMMARY

Batch #	:	149994	Analysis	:	TEH
Started By	:	CRD	Finished By	:	NAV
Method	:	3520C	Units	:	mL
Spike #1 ID	:	S11801	Spike #3 ID	:	S11800

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
211361-001		Water	500	2.5	1	0.005	7	.5		.5	3630C	TEH	
211361-002		Water	500	2.5	1	0.005	7	.5		.5	3630C	TEH	
211361-003		Water	500	2.5	1	0.005	7	.5		.5	3630C	TEH	
211364-004		Water	500	2.5	1	0.005	7	.5		.5	3630C	TEH	MSS
211365-005		SPLP Leachate	500	2.5	1	0.005	10	.5			3630C	TEH	SPLP
211365-006		SPLP Leachate	500	2.5	1	0.005	10	.5			3630C	TEH	SPLP
211365-007		SPLP Leachate	500	2.5	1	0.005	10	.5			3630C	TEH	SPLP
211365-008		SPLP Leachate	500	2.5	1	0.005	7	.5			3630C	TEH	SPLP
211369-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211369-002		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
211416-001		Water	500	2.5	1	0.005	7	.5			3630C	(rebatched)	LOTS OF SEDIMENT
211416-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	LOTS OF SEDIMENT
211423-001		Water	500	2.5	1	0.005	7	.5				TEH	
211424-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211424-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211424-003		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
211429-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211429-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211429-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC491945	BLANK	Water	500	2.5	1	0.005		.5		.5	3630C		
QC491946	LCS	Water	500	2.5	1	0.005		.5	.5	.5	3630C		
QC491947	MS	Water	500	2.5	1	0.005	7	.5	.5	.5	3630C		
QC491948	MSD	Water	500	2.5	1	0.005	7	.5	.5	.5	3630C		
QC491949	PREPBLK	SPLP Leachate	500	2.5	1	0.005	7	.5			3630C		SPLP

Analyst: TFB Date: 04/21/09 Reviewer: DNT Date: 04/21/09

Page 1 of 1

LIMS Batch No: 149994
 LIMS Analysis: TEH/M
 Date Extracted: 4/15/09

Extraction Method:

- mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
211365-005		500	10	2.5	X SPLP	
-006			1		X	
-007			↓		X	
↓ -008			7		X ↓	
211361-001	B				X	
-002	A				X	
↓ -003	↓				X	
211364-004	D				X MSS	
211369-001	H		↓		X	
↓ -002	D		5		X	
211416-001	K		7		X LOTS OF SEDIMENT	
↓ -002	↓				X ↓	
211423-001	G					
211424-001	I				X	
-002	↓		↓		X	
↓ -003	D		5		X	
211429-001	F		7		X	
-002					X	
↓ -003	↓		↓		X	
* MB QC 491945	MA		NA		X	
LCS	6	↓	↓		X	
MS	7	C	7		X	
MSD	8	C			X	
Prep BLK	9	NA	↓	↓	X SPLP	

Mfg & Lot# / LIMS# / Time Date/ Initials

0.5/0.5 mL of TEH SURR was added to all samples

0.5 mL of TEH SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄ 3520c: Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time: 1800

Extraction End Time: 1205

 3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to final volume at temperature (degrees C) 100°

Relinquished to TEH Department ✓

Mark Dowdell 4/15/09
 Extraction Chemist Date

Continued from Page _____
 Continued on Page _____

D 4/21/09
 Reviewed by Date

Prep Chemist: NAM
 Cleanup Date: 04/17/09

Benchbook # BK 2867
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
211361-001	149994	1.0	1.0	
↓ -002				
↓ -003				
211364-004				MSS
5 211365-005				
↓ -006				
↓ -007				
↓ -008				
10 211369-001				
↓ -002				
211416-001				
↓ -002				
15 211424-001				
↓ -002				
↓ -003				
20 MB QC491945				
LCS ↓ 6				
ms ↓ 7				
msD ↓ 8				
PREBLK ↓ 9				
25 211359-002	150019	1.0	1.0	
↓ -003				
↓ -004				
↓ -005				
↓ -006				
↓ -007				
30 ↓ -008				

- Extracts were cleaned up using C&T assembled ✓ g columns
 Extracts were cleaned up using 1.0 g cartridges
 Extracts were eluted with 4.0 mL CH₂Cl₂
 Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
N/A	MAM 04/17/09
SP10882	
EM49034	
✓	

Extraction Chemist / Date

04/17/09

Continued from page ✓
Continued on page 10

Reviewed by / Date

J. M. H. 4/17/09

SAMPLE PREPARATION SUMMARY

Batch # : 150274 Analysis : TEH
Started By : MAM Prep Date : 23-APR-2009 19:38 Finished By : JJB
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S11801 Spike #2 ID : S11867

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
211416-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	re-x (sediment)
211594-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-009		Water	500	2.5	1	0.005	9	.5			3630C	TEHM	
211594-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211594-013		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
211594-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211597-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211597-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211607-001		Water	500	2.5	1	0.005	7	.5				TEH	
211607-002		Water	500	2.5	1	0.005	7	.5				TEH	
211608-001		Water	500	2.5	1	0.005	7	.5				TEH	
211643-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211643-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
211644-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC493061	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC493062	BS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC493063	BSD	Water	500	2.5	1	0.005		.5	.5		3630C		

JDG 04/27/09 : Matrix spikes were not performed for this analysis in batch 150274 due to insufficient sample amount.

Analyst: DNT Date: 04/28/09 Reviewer: TFB Date: 04/28/09

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK2869

LIMS Batch No: 150274
 LIMS Analysis: TEH/M
 Date Extracted: 4/23/09

Extraction Method:

mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
211416-001	K	500	7	2-5	X	RE-X (SEDIMENT)
↓ -002						CRD 4/23/09
211593-001						CRD 4/23/09
211594-001	F	500	7	2-5	X	
-005	D					
-006	E		↓			
-007	G		9			
-008	E		7			
-009	↓					
-010	H					
-011	F					
-012	E		↓			
-013	H		5			
↓ -014	H		7			
211597-001	D					
↓ -002						↓
211607-001						
↓ -002						
211608-001	G					
211643-001	F				X	
↓ -002	↓					
211644-001	F		↓			
M8 QC 493061	NA		NA			
BS	↓ 62					
BS	↓ 63	↓	↓	↓	↓	

8015 4/26/09 Mfg & Lot# / LIMS # / Time Date/ Initials

0.5 mL of TEH_SURR was added to all samples

0.5 mL of TEH_SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄

3520c: Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to final volume at temperature (degrees C)

Relinquished to TEH Department

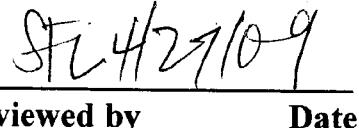
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S115867A	
FS 075640	
EM49034	
1938A	✓
210	DX 4/24/09
N/A	
EM49007904	SPL FPC JJB 4/26/09
100°	


04/23/09

Extraction Chemist

Date

Continued from Page
Continued on Page


SPL 4/27/09

Reviewed by

Date

Prep Chemist: N/ACleanup Date: 4/26/09

Benchbook # BK 2867

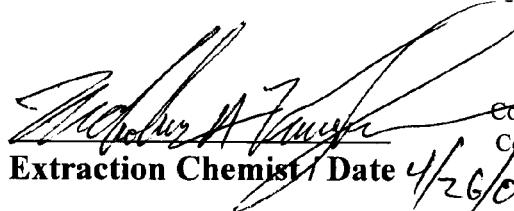
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
211416 - 001	150274	1.0	1.0	
211594 - 001				
5				
10				
15				
20				
25				
30				

4/24/09

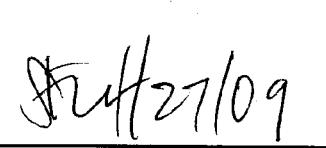
- Extracts were cleaned up using C&T assembled ✓ g columns
 Extracts were cleaned up using 1.0g cartridges
Extracts were eluted with 4.0 mL CH₂Cl₂
Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
<u>N/A</u>	<u>N/A 4/24/09</u>
<u>SPI0882</u>	
<u>EM49034</u>	
	<u>✓</u>



Extraction Chemist Date 4/26/09

Continued from page
Continued on page



Reviewed by / Date

Laboratory Job Number 211416

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8260B
Field ID:	E027	Batch#:	150153
Lab ID:	211416-001	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Analyzed:	04/21/09
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.2
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	1.0
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	0.2
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2-Dichloroethene (total)	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-120
Toluene-d8	103	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8260B
Field ID:	E026	Batch#:	150243
Lab ID:	211416-002	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Analyzed:	04/23/09
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.2
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	1.0
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	0.2
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2-Dichloroethene (total)	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-120
Toluene-d8	104	80-120
Bromofluorobenzene	86	80-120

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	150153
Units:	ug/L	Analyzed:	04/21/09
Diln Fac:	1.000		

Type: BS Lab ID: QC492568

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.25	101	65-135
Benzene	20.00	20.31	102	65-135
Trichloroethene	20.00	21.29	106	65-135
Toluene	20.00	21.52	108	65-135
Chlorobenzene	20.00	19.54	98	65-135

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-120
Toluene-d8	105	80-120
Bromofluorobenzene	89	80-120

Type: BSD Lab ID: QC492569

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	20.69	103	65-135	2	35
Benzene	20.00	20.16	101	65-135	1	35
Trichloroethene	20.00	21.08	105	65-135	1	35
Toluene	20.00	21.44	107	65-135	0	35
Chlorobenzene	20.00	19.74	99	65-135	1	35

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-120
Toluene-d8	104	80-120
Bromofluorobenzene	91	80-120

RPD= Relative Percent Difference

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC492570	Batch#:	150153
Matrix:	Water	Analyzed:	04/21/09
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.2
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	1.0
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	0.2
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2-Dichloroethene (total)	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-120
Toluene-d8	102	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	150243
Units:	ug/L	Analyzed:	04/23/09
Diln Fac:	1.000		

Type: BS Lab ID: QC492932

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.42	110	65-135
Benzene	25.00	27.26	109	65-135
Trichloroethene	25.00	29.02	116	65-135
Toluene	25.00	29.93	120	65-135
Chlorobenzene	25.00	25.85	103	65-135

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-120
Toluene-d8	106	80-120
Bromofluorobenzene	90	80-120

Type: BSD Lab ID: QC492933

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.04	108	65-135	1	35
Benzene	25.00	26.31	105	65-135	4	35
Trichloroethene	25.00	27.91	112	65-135	4	35
Toluene	25.00	28.81	115	65-135	4	35
Chlorobenzene	25.00	25.55	102	65-135	1	35

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	76-120
Toluene-d8	105	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 5030B
Project#:	Y0239-04.A3	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC492934	Batch#:	150243
Matrix:	Water	Analyzed:	04/23/09
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.2
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	1.0
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	0.2
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2-Dichloroethene (total)	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-120
Toluene-d8	103	80-120
Bromofluorobenzene	87	80-120

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

CURTIS & TOMPKINS BFB TUNE FOR 211416 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839131620003 File : kd103 Time : 01-APR-2009 10:37

Standards: S10902

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	48848	17.19	
75	30% - 60% of mass 95	147370	51.85	
95		284224	100.00	
96	5% - 9% of mass 95	18495	6.51	
173	< 2% of mass 174	613	0.36	
174	> 50% and < 100% of mass 95	168853	59.41	
175	5% - 9% of mass 174	12705	7.52	
176	> 95% and < 101% of mass 174	163712	96.96	
177	5% - 9% of mass 176	10974	6.70	

Analyst: ACM Date: 04/01/09 Reviewer: LW Date: 04/02/09
Page 1 of 1 839131620003

CURTIS & TOMPKINS BFB TUNE FOR 211416 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839160406002 File : kdl02 Time : 21-APR-2009 09:50

Standards: S10902

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10046	16.11	
75	30% - 60% of mass 95	31749	50.93	
95		62344	100.00	
96	5% - 9% of mass 95	3996	6.41	
173	< 2% of mass 174	181	0.41	
174	> 50% and < 100% of mass 95	44074	70.69	
175	5% - 9% of mass 174	3055	6.93	
176	> 95% and < 101% of mass 174	42184	95.71	
177	5% - 9% of mass 176	2783	6.60	

Analyst: ACM Date: 04/21/09 Reviewer: LW Date: 04/21/09
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CURTIS & TOMPKINS BFB TUNE FOR 211416 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839163249002 File : kdn02 Time : 23-APR-2009 09:33

Standards: S10902

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13520	16.28	
75	30% - 60% of mass 95	44744	53.89	
95		83024	100.00	
96	5% - 9% of mass 95	5077	6.12	
173	< 2% of mass 174	213	0.39	
174	> 50% and < 100% of mass 95	54877	66.10	
175	5% - 9% of mass 174	4105	7.48	
176	> 95% and < 101% of mass 174	54354	99.05	
177	5% - 9% of mass 176	3398	6.25	

Analyst: ACM Date: 04/23/09 Reviewer: LW Date: 04/23/09
Page 1 of 1 839163249002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 MSVOA Water: EPA 8260B

Inst : MSVOA11
 Calnum : 839131620002
 Units : ug/L

Name : 8260GX11
 Date : 01-APR-2009 11:58
 Type : WATER
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds									
L1	kd106	839131620006		01-APR-2009 11:58	S11357 (1000000X), S11721 (2000000X), S11730 (2000000X), S10687 (2000000X), S11736 (2500X)									
L2	kd107	839131620007		01-APR-2009 12:26	S11357 (500000X), S11721 (1000000X), S11730 (1000000X), S10687 (1000000X), S11736 (2500X)									
L3	kd108	839131620008		01-APR-2009 12:54	S11357 (250000X), S11721 (250000X), S11730 (250000X), S10687 (500000X), S11736 (2500X)									
L4	kd109	839131620009		01-APR-2009 13:23	S11357 (100000X), S11721 (100000X), S11730 (100000X), S10687 (200000X), S11736 (2500X)									
L5	kd110	839131620010		01-APR-2009 13:51	S11357 (50000X), S11721 (50000X), S11730 (50000X), S10687 (100000X), S11736 (2500X)									
L6	kd111	839131620011		01-APR-2009 14:19	S11357 (25000X), S11721 (25000X), S11730 (25000X), S10687 (50000X), S11736 (2500X)									
L7	kd112	839131620012		01-APR-2009 14:47	S11357 (10000X), S11721 (10000X), S11730 (10000X), S10687 (20000X), S11736 (2500X)									
L8	kd113	839131620013		01-APR-2009 15:15	S11357 (6667X), S11721 (6667X), S11730 (6667X), S10687 (13330X), S11736 (2500X)									
L9	kd114	839131620014		01-APR-2009 15:43	S11357 (5000X), S11721 (5000X), S11730 (5000X), S10687 (10000X), S11736 (2500X)									

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	Flg
Chloromethane		0.5660	0.5406	0.5438	0.5260	0.5151	0.5165	0.5465	0.5263	AVRG	1.86879			0.5351	3	15	0.10	0.99	
Vinyl Chloride	0.4983	0.4587	0.5048	0.6003	0.5260	0.4834	0.5092	0.5569	0.5372	AVRG	1.92514			0.5194	8	15	0.05	0.99	
Bromomethane		0.2828m	0.3082m	0.3035m	0.3094	0.3168	0.3531	0.3768	0.3586	AVRG	3.06628			0.3261	10	15	0.05	0.99	
Chloroethane		0.3998	0.4039	0.4297	0.4156	0.3855	0.3844	0.3931	0.3786	AVRG	2.50733			0.3988	4	15	0.05	0.99	
Acetone			0.2571	0.2310	0.2299	0.2090	0.2193	0.2165	0.2338	AVRG	4.38395			0.2281	7	15	0.05	0.99	
1,1-Dichloroethene		0.3372m	0.4136m	0.4294m	0.4412m	0.4244m	0.3862	0.3691m	0.4173	AVRG	2.48580			0.4023	9	15	0.05	0.99	
Methylene Chloride			0.5653	0.5742	0.5398	0.5315	0.5147	0.5179	0.5142	AVRG	1.86297			0.5368	5	15	0.05	0.99	
Carbon Disulfide		1.4691	1.6416	1.6799	1.7852	1.6933	1.5907	1.5567	1.6922	AVRG	0.61028			1.6386	6	15	0.05	0.99	
MTBE		1.5825	1.6482	1.6906	1.6468	1.6423	1.6295	1.6433	1.6845	AVRG	0.60755			1.6459	2	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5077m	0.5243m	0.5288	0.5177m	0.5023m	0.4737	0.4769	0.4942m	AVRG	1.98719			0.5032	4	15	0.05	0.99	
Vinyl Acetate			0.7104	0.9360	0.7902	0.8494	0.7519	0.9164	0.7663	AVRG	1.22362			0.8172	10	15	0.05	0.99	
1,1-Dichloroethane		0.9713	1.0118	0.9957	1.0023	0.9678	0.9222	0.9359	0.9404	AVRG	1.03260			0.9684	3	15	0.10	0.99	
2-Butanone			0.2098m	0.2074m	0.2081m	0.2028	0.2083m	0.2090	0.2237	AVRG	4.76447			0.2099	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5582	0.5899m	0.5946	0.6014	0.5696m	0.5532	0.5628	0.5639m	AVRG	1.74154			0.5742	3	15	0.05	0.99	
Chloroform		0.9640	0.9950	0.9521	0.9614	0.9319	0.9008	0.9098	0.9087	AVRG	1.06330			0.9405	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.6498	0.7567	0.7382	0.8074	0.7441	0.6654	0.6583	0.7314	AVRG	1.39102			0.7189	8	15	0.05	0.99	
Carbon Tetrachloride		0.2362	0.2886	0.2778	0.3171	0.3005	0.2470	0.2405	0.2877	AVRG	3.64372			0.2744	11	15	0.05	0.99	
1,2-Dichloroethane		0.3820	0.4153	0.4101	0.4041	0.4002	0.3904	0.3968	0.3945	AVRG	2.50514			0.3992	3	15	0.05	0.99	
Benzene		1.2292	1.2447	1.1736	1.2358	1.1822	1.1131	1.1278	1.1268	AVRG	0.84808			1.1791	5	15	0.05	0.99	
Trichloroethene		0.2733	0.2955	0.2754	0.3006	0.2829	0.2606	0.2623	0.2766	AVRG	3.59192			0.2784	5	15	0.05	0.99	
1,2-Dichloropropane		0.3054	0.3156	0.3186	0.3231	0.3088	0.2972	0.3050	0.3031	AVRG	3.23011			0.3096	3	15	0.05	0.99	
Bromodichloromethane		0.3684	0.3821	0.3881	0.4018	0.3961	0.3952	0.4061	0.4055	AVRG	2.54511			0.3929	3	15	0.05	0.99	
4-Methyl-2-Pentanone		0.2207	0.2069	0.2187	0.2133	0.2279	0.2297	0.2359	0.2468	AVRG	4.44454			0.2250	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4382	0.4781	0.4710	0.4938	0.4918	0.4817	0.4862	0.4824	AVRG	2.09250			0.4779	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	Flg
Toluene		0.7862	0.7791	0.7008	0.7747	0.7334	0.6725	0.7015	0.6945	AVRG		1.36921		0.7304	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.3966	0.4162	0.4246	0.4459	0.4494	0.4483	0.4542	0.4521	AVRG		2.29410		0.4359	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1347	0.1477	0.1414	0.1429	0.1381	0.1360	0.1406	0.1408	AVRG		7.12853		0.1403	3	15	0.05	0.99	
2-Hexanone			0.1735	0.1691	0.1771	0.1789	0.1885	0.1968	0.2116	AVRG		5.40320		0.1851	8	15	0.05	0.99	
Tetrachloroethene		0.2256	0.2569	0.2240	0.2701	0.2453	0.2049	0.2044	0.2296	AVRG		4.29936		0.2326	10	15	0.05	0.99	
Dibromochloromethane		0.2501	0.2723	0.2748	0.2966	0.2980	0.3027	0.3123	0.3107	AVRG		3.45212		0.2897	8	15	0.05	0.99	
Chlorobenzene		0.9986	1.0006	0.8977	0.9627	0.9139	0.8575	0.8903	0.8606	AVRG		1.08374		0.9227	6	15	0.30	0.99	
Ethylbenzene		1.6690	1.7287	1.4958	1.7194	1.6320	1.4529	1.5187	1.5163	AVRG		0.62829		1.5916	7	15	0.05	0.99	
m,p-Xylenes	0.4630	0.5850	0.6238	0.5552	0.6397	0.6043	0.5410	0.5594	0.5512	AVRG		1.75696		0.5692	9	15	0.05	0.99	
o-Xylene		0.6060	0.6417	0.5714	0.6405	0.6122	0.5621	0.5760	0.5616	AVRG		1.67667		0.5964	6	15	0.05	0.99	
Styrene		0.9289	1.0180	0.9434	1.0669	1.0408	0.9935	1.0348	1.0082	AVRG		0.99572		1.0043	5	15	0.05	0.99	
Bromoform		0.1331	0.1432	0.1395	0.1566	0.1574	0.1642	0.1699	0.1727	AVRG		6.46896		0.1546	9	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.9375	0.9586	0.9550	0.9530	0.9163	0.8580	0.9002	0.8737	AVRG		1.08809		0.9190	4	15	0.30	0.99	
1,2-Dichloroethane-d4		0.3754	0.3792	0.3805	0.3748	0.3729	0.3689	0.3619	0.3659	AVRG		2.68502		0.3724	2	15	0.05	0.99	
Toluene-d8		1.2818	1.2796	1.2791	1.2825	1.2787	1.2870	1.2852	1.2873	AVRG		0.77964		1.2826	0	15	0.05	0.99	
Bromofluorobenzene		1.2715	1.2751	1.3101	1.2922	1.2609	1.2210	1.2121	1.1955	AVRG		0.79693		1.2548	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	6	2.000	1	5.000	2	10.00	-2	20.00	-4	50.00	-3	75.00	2	100.0	-2
Vinyl Chloride	0.500	-4	1.000	-12	2.000	-3	5.000	16	10.00	1	20.00	-7	50.00	-2	75.00	7	100.0	3
Bromomethane			1.000	-13	2.000	-6	5.000	-7	10.00	-5	20.00	-3	50.00	8	75.00	16	100.0	10
Chloroethane			1.000	0	2.000	1	5.000	8	10.00	4	20.00	-3	50.00	-4	75.00	-1	100.0	-5
Acetone					2.000	13	5.000	1	10.00	1	20.00	-8	50.00	-4	75.00	-5	100.0	3
1,1-Dichloroethene			0.500	-16	2.000	3	5.000	7	10.00	10	20.00	5	50.00	-4	75.00	-8	100.0	4
Methylene Chloride					2.000	5	5.000	7	10.00	1	20.00	-1	50.00	-4	75.00	-4	100.0	-4
Carbon Disulfide			0.500	-10	2.000	0	5.000	3	10.00	9	20.00	3	50.00	-3	75.00	-5	100.0	3
MTBE			0.500	-4	2.000	0	5.000	3	10.00	0	20.00	0	50.00	-1	75.00	0	100.0	2
trans-1,2-Dichloroethene			0.500	1	2.000	4	5.000	5	10.00	3	20.00	0	50.00	-6	75.00	-5	100.0	-2
Vinyl Acetate					2.000	-13	5.000	15	10.00	-3	20.00	4	50.00	-8	75.00	12	100.0	-6
1,1-Dichloroethane			0.500	0	2.000	4	5.000	3	10.00	3	20.00	0	50.00	-5	75.00	-3	100.0	-3
2-Butanone					2.000	0	5.000	-1	10.00	-1	20.00	-3	50.00	-1	75.00	0	100.0	7
cis-1,2-Dichloroethene			0.500	-3	2.000	3	5.000	4	10.00	5	20.00	-1	50.00	-4	75.00	-2	100.0	-2
Chloroform			0.500	3	2.000	6	5.000	1	10.00	2	20.00	-1	50.00	-4	75.00	-3	100.0	-3
1,1,1-Trichloroethane			0.500	-10	2.000	5	5.000	3	10.00	12	20.00	4	50.00	-7	75.00	-8	100.0	2
Carbon Tetrachloride			0.500	-14	2.000	5	5.000	1	10.00	16	20.00	10	50.00	-10	75.00	-12	100.0	5
1,2-Dichloroethane			0.500	-4	2.000	4	5.000	3	10.00	1	20.00	0	50.00	-2	75.00	-1	100.0	-1
Benzene			0.500	4	2.000	6	5.000	0	10.00	5	20.00	0	50.00	-6	75.00	-4	100.0	-4
Trichloroethene			0.500	-2	2.000	6	5.000	-1	10.00	8	20.00	2	50.00	-6	75.00	-6	100.0	-1
1,2-Dichloropropane			0.500	-1	2.000	2	5.000	3	10.00	4	20.00	0	50.00	-4	75.00	-1	100.0	-2
Bromodichloromethane			0.500	-6	2.000	-3	5.000	-1	10.00	2	20.00	1	50.00	1	75.00	3	100.0	3
4-Methyl-2-Pentanone			0.500	-2	2.000	-8	5.000	-3	10.00	-5	20.00	1	50.00	2	75.00	5	100.0	10
cis-1,3-Dichloropropene			0.500	-8	2.000	0	5.000	-1	10.00	3	20.00	3	50.00	1	75.00	2	100.0	1
Toluene			0.500	8	2.000	7	5.000	-4	10.00	6	20.00	0	50.00	-8	75.00	-4	100.0	-5
trans-1,3-Dichloropropene			0.500	-9	2.000	-5	5.000	-3	10.00	2	20.00	3	50.00	3	75.00	4	100.0	4
1,1,2-Trichloroethane			0.500	-4	2.000	5	5.000	1	10.00	2	20.00	-2	50.00	-3	75.00	0	100.0	0
2-Hexanone					2.000	-6	5.000	-9	10.00	-4	20.00	-3	50.00	2	75.00	6	100.0	14
Tetrachloroethene			0.500	-3	2.000	10	5.000	-4	10.00	16	20.00	5	50.00	-12	75.00	-12	100.0	-1
Dibromochloromethane			0.500	-14	2.000	-6	5.000	-5	10.00	2	20.00	3	50.00	5	75.00	8	100.0	7
Chlorobenzene			0.500	8	2.000	8	5.000	-3	10.00	4	20.00	-1	50.00	-7	75.00	-4	100.0	-7
Ethylbenzene			0.500	5	2.000	9	5.000	-6	10.00	8	20.00	3	50.00	-9	75.00	-5	100.0	-5
m,p-Xylenes	0.500	-19	1.000	3	4.000	10	10.00	-2	20.00	12	40.00	6	100.0	-5	150.0	-2	200.0	-3
o-Xylene			0.500	2	2.000	8	5.000	-4	10.00	7	20.00	3	50.00	-6	75.00	-3	100.0	-6
Styrene			0.500	-8	2.000	1	5.000	-6	10.00	6	20.00	4	50.00	-1	75.00	3	100.0	0
Bromoform			0.500	-14	2.000	-7	5.000	-10	10.00	1	20.00	2	50.00	6	75.00	10	100.0	12
1,1,2,2-Tetrachloroethane			0.500	2	2.000	4	5.000	4	10.00	4	20.00	0	50.00	-7	75.00	-2	100.0	-5
1,2-Dichloroethane-d4			50.00	1	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-1	50.00	-3	50.00	-2
Toluene-d8			50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0
Bromofluorobenzene			50.00	1	50.00	2	50.00	4	50.00	3	50.00	0	50.00	-3	50.00	-3	50.00	-5

ACM 04/02/09 : All manual integrations done to integrate at noise level. (BrMe 1,1-DCE, trans-1,2-DCE,

2-butanone, cis-1,2-DCE, n-butylbz).

Analyst: ACM

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg=Average response factor

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Date: 04/02/09

Reviewer: LW

Date: 04/02/09

839131620002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839131620002 Cal Date : 01-APR-2009 Type : WATER

ICV 839131620015 (kd115 01-APR-2009) stds: S11751 (10000X), S11736 (2500X)
ICV 839131620016 (kd116 01-APR-2009) stds: S11752 (10000X), S11443 (10000X),
S11731 (10000X), S11736 (2500X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	839131620015	0.5351	0.4779	25.00	22.33	ug/L	-11	30	
Vinyl Chloride	839131620015	0.5194	0.5212	25.00	25.08	ug/L	0	20	
Bromomethane	839131620015	0.3261	0.2646	25.00	20.28	ug/L	-19	30	
Chloroethane	839131620015	0.3988	0.3768	25.00	23.62	ug/L	-6	30	
Acetone	839131620016	0.2281	0.1693	25.00	18.56	ug/L	-26	40	
1,1-Dichloroethene	839131620016	0.4023	0.4147	25.00	25.77	ug/L	3	20	
Methylene Chloride	839131620016	0.5368	0.5385	25.00	25.08	ug/L	0	30	
Carbon Disulfide	839131620016	1.6386	1.4676	25.00	22.39	ug/L	-10	30	
MTBE	839131620016	1.6459	1.5075	25.00	22.90	ug/L	-8	30	
trans-1,2-Dichloroethene	839131620016	0.5032	0.5220	25.00	25.93	ug/L	4	30	m
Vinyl Acetate	839131620016	0.8172	0.4842	25.00	14.81	ug/L	-41	40	v- ***
1,1-Dichloroethane	839131620016	0.9684	0.9398	25.00	24.26	ug/L	-3	30	
2-Butanone	839131620016	0.2099	0.1836	25.00	21.87	ug/L	-13	40	
cis-1,2-Dichloroethene	839131620016	0.5742	0.5711	25.00	24.86	ug/L	-1	30	m
Chloroform	839131620016	0.9405	0.9253	25.00	24.60	ug/L	-2	20	
1,1,1-Trichloroethane	839131620016	0.7189	0.7725	25.00	26.87	ug/L	7	30	
Carbon Tetrachloride	839131620016	0.2744	0.3174	25.00	28.91	ug/L	16	30	
1,2-Dichloroethane	839131620016	0.3992	0.3905	25.00	24.45	ug/L	-2	30	
Benzene	839131620016	1.1791	1.2085	25.00	25.62	ug/L	2	30	
Trichloroethene	839131620016	0.2784	0.3039	25.00	27.29	ug/L	9	30	
1,2-Dichloropropane	839131620016	0.3096	0.3119	25.00	25.19	ug/L	1	20	
Bromodichloromethane	839131620016	0.3929	0.3858	25.00	24.55	ug/L	-2	30	
4-Methyl-2-Pentanone	839131620016	0.2250	0.2186	25.00	24.29	ug/L	-3	40	
cis-1,3-Dichloropropene	839131620016	0.4779	0.5030	25.00	26.31	ug/L	5	30	
Toluene	839131620016	0.7304	0.7723	25.00	26.43	ug/L	6	20	
trans-1,3-Dichloropropene	839131620016	0.4359	0.4244	25.00	24.34	ug/L	-3	30	
1,1,2-Trichloroethane	839131620016	0.1403	0.1435	25.00	25.57	ug/L	2	30	
2-Hexanone	839131620016	0.1851	0.1705	25.00	23.03	ug/L	-8	40	
Tetrachloroethene	839131620016	0.2326	0.2761	25.00	29.68	ug/L	19	30	
Dibromochloromethane	839131620016	0.2897	0.3059	25.00	26.40	ug/L	6	30	
Chlorobenzene	839131620016	0.9227	0.9571	25.00	25.93	ug/L	4	30	
Ethylbenzene	839131620016	1.5916	1.7585	25.00	27.62	ug/L	10	20	
m,p-Xylenes	839131620016	0.5692	0.6465	50.00	56.79	ug/L	14	30	
o-Xylene	839131620016	0.5964	0.6536	25.00	27.40	ug/L	10	30	
Styrene	839131620016	1.0043	1.1052	25.00	27.51	ug/L	10	30	
Bromoform	839131620016	0.1546	0.1623	25.00	26.25	ug/L	5	30	
1,1,2,2-Tetrachloroethane	839131620016	0.9190	0.9019	25.00	24.53	ug/L	-2	30	

=low bias m=manual integration v=ICV

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839131620002 ICVs

CURTIS & TOMPKINS SPIKE USER REPORT FOR 211416 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC492568 IDF : 1.0
Seqnum : 839160406003.8 File : kd103 Time : 21-APR-2009 10:03
Cal : 839131620002 Caldate : 01-APR-2009 Caltype : WATER
Standards: S11752 (12500X), S11859 (12500X), S11731 (12500X), S11751 (12500X),
S11736 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5351	0.4064	20.00	15.19	ug/L	-24	30	0.1000	!c- u
Vinyl Chloride	0.5194	0.4525	20.00	17.42	ug/L	-13	20	0.0500	u
Bromomethane	0.3261	0.1693	20.00	10.38	ug/L	-48	30	0.0500	c- m u ***
Chloroethane	0.3988	0.3625	20.00	18.18	ug/L	-9	30	0.0500	u
Acetone	0.2281	0.1941	20.00	17.02	ug/L	-15	40	0.0500	m u
1,1-Dichloroethene	0.4023	0.4073	20.00	20.25	ug/L	1	20	0.0500	m u
Methylene Chloride	0.5368	0.5289	20.00	19.71	ug/L	-1	30	0.0500	u
Carbon Disulfide	1.6386	1.4141	20.00	17.26	ug/L	-14	30	0.0500	u
MTBE	1.6459	1.4364	20.00	17.45	ug/L	-13	30	0.0500	u
trans-1,2-Dichloroethene	0.5032	0.5148	20.00	20.46	ug/L	2	30	0.0500	m u
Vinyl Acetate	0.8172	0.6588	20.00	16.12	ug/L	-19	40	0.0500	u v- ***
1,1-Dichloroethane	0.9684	0.9041	20.00	18.67	ug/L	-7	30	0.1000	u
2-Butanone	0.2099	0.1611	20.00	15.35	ug/L	-23	40	0.0500	m u
cis-1,2-Dichloroethene	0.5742	0.5474	20.00	19.07	ug/L	-5	30	0.0500	m u
Chloroform	0.9405	0.9907	20.00	21.07	ug/L	5	20	0.0500	u
1,1,1-Trichloroethane	0.7189	0.8836	20.00	24.58	ug/L	23	30	0.0500	!c+ u
Carbon Tetrachloride	0.2744	0.4037	20.00	29.42	ug/L	47	30	0.0500	c+ u ***
1,2-Dichloroethane	0.3992	0.4344	20.00	21.76	ug/L	9	30	0.0500	u
Benzene	1.1791	1.1977	20.00	20.31	ug/L	2	30	0.0500	u
Trichloroethene	0.2784	0.2963	20.00	21.29	ug/L	6	30	0.0500	u
1,2-Dichloropropane	0.3096	0.2742	20.00	17.71	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.3929	0.4209	20.00	21.42	ug/L	7	30	0.0500	u
4-Methyl-2-Pentanone	0.2250	0.1828	20.00	16.25	ug/L	-19	40	0.0500	u
cis-1,3-Dichloropropene	0.4779	0.5141	20.00	21.52	ug/L	8	30	0.0500	u
Toluene	0.7304	0.7857	20.00	21.52	ug/L	8	20	0.0500	u
trans-1,3-Dichloropropene	0.4359	0.4369	20.00	20.05	ug/L	0	30	0.0500	u
1,1,2-Trichloroethane	0.1403	0.1499	20.00	21.36	ug/L	7	30	0.0500	u
2-Hexanone	0.1851	0.1231	20.00	13.31	ug/L	-33	40	0.0500	!c- u
Tetrachloroethene	0.2326	0.2785	20.00	23.95	ug/L	20	30	0.0500	u
Dibromochloromethane	0.2897	0.3036	20.00	20.96	ug/L	5	30	0.0500	u
Chlorobenzene	0.9227	0.9015	20.00	19.54	ug/L	-2	30	0.3000	u
Ethylbenzene	1.5916	1.5581	20.00	19.58	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.5692	0.5815	40.00	40.86	ug/L	2	30	0.0500	u
o-Xylene	0.5964	0.5599	20.00	18.78	ug/L	-6	30	0.0500	u
Styrene	1.0043	0.9377	20.00	18.67	ug/L	-7	30	0.0500	u
Bromoform	0.1546	0.1774	20.00	22.96	ug/L	15	30	0.1000	u
1,1,2,2-Tetrachloroethane	0.9190	0.7530	20.00	16.39	ug/L	-18	30	0.3000	u
1,2-Dichloroethane-d4	0.3724	0.3780	50.00	50.74	ug/L	1	30	0.0500	u
Toluene-d8	1.2826	1.3444	50.00	52.41	ug/L	5	30	0.0500	u
Bromofluorobenzene	1.2548	1.1213	50.00	44.68	ug/L	-11	30	0.0500	u

ISTD (ICAL kd112)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1290873	1226232	-5.01	9.64	9.63	-0.01
1,4-Difluorobenzene	2394933	2232808	-6.77	10.69	10.69	0.00
Chlorobenzene-d5	2043495	2278732	11.51	14.25	14.25	0.00
1,4-Dichlorobenzene-d4	875369	1118065	27.72	16.68	16.68	0.00

ACM 04/21/09 [Bromomethane]: Corrected baseline noise or negative peak . [general version]

ACM 04/21/09 [1,1-Dichloroethene]: Corrected baseline noise or negative peak . [general version]

ACM 04/21/09 [Acetone]: Corrected baseline noise or negative peak . [general version]

ACM 04/21/09 [trans-1,2-Dichloroethene]: Corrected baseline noise or negative peak . [general version]

ACM 04/21/09 [2-Butanone]: Corrected baseline noise or negative peak . [general version]

ACM 04/21/09 [cis-1,2-Dichloroethene]: Corrected baseline noise or negative peak . [general version]

ACM 04/21/09 [1,2-Dibromo-3-Chloropropane]: Corrected baseline noise or negative peak . [general version]

Analyst: TEW Date: 04/24/09 Reviewer: LW Date: 04/27/09

!=warning +high bias -=low bias c=CCV m=manual integration u=use v=ICV

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839160406003.8

CURTIS & TOMPKINS SPIKE USER REPORT FOR 211416 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC492932 IDF : 1.0
Seqnum : 839163249003.6 File : kdn03 Time : 23-APR-2009 09:47
Cal : 839131620002 Caldate : 01-APR-2009 Caltype : WATER
Standards: S11752 (10000X), S11859 (10000X), S11731 (10000X), S11912 (10000X),
S11736 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5351	0.3937	25.00	18.39	ug/L	-26	30	0.1000	!c- u
Vinyl Chloride	0.5194	0.4705	25.00	22.64	ug/L	-9	20	0.0500	u
Bromomethane	0.3261	0.2099	25.00	16.09	ug/L	-36	30	0.0500	c- m u ***
Chloroethane	0.3988	0.3660	25.00	22.94	ug/L	-8	30	0.0500	u
Acetone	0.2281	0.2015	25.00	22.09	ug/L	-12	40	0.0500	m u
1,1-Dichloroethene	0.4023	0.4412	25.00	27.42	ug/L	10	20	0.0500	m u
Methylene Chloride	0.5368	0.5729	25.00	26.68	ug/L	7	30	0.0500	u
Carbon Disulfide	1.6386	1.5233	25.00	23.24	ug/L	-7	30	0.0500	u
MTBE	1.6459	1.5615	25.00	23.72	ug/L	-5	30	0.0500	u
trans-1,2-Dichloroethene	0.5032	0.5638	25.00	28.01	ug/L	12	30	0.0500	m u
Vinyl Acetate	0.8172	0.6832	25.00	20.90	ug/L	-16	40	0.0500	u v- ***
1,1-Dichloroethane	0.9684	0.9685	25.00	25.00	ug/L	0	30	0.1000	u
2-Butanone	0.2099	0.1674	25.00	19.94	ug/L	-20	40	0.0500	m u
cis-1,2-Dichloroethene	0.5742	0.6094	25.00	26.53	ug/L	6	30	0.0500	m u
Chloroform	0.9405	1.0863	25.00	28.88	ug/L	16	20	0.0500	u
1,1,1-Trichloroethane	0.7189	0.9854	25.00	34.27	ug/L	37	30	0.0500	c+ u ***
Carbon Tetrachloride	0.2744	0.4573	25.00	41.65	ug/L	67	30	0.0500	c+ u ***
1,2-Dichloroethane	0.3992	0.4639	25.00	29.05	ug/L	16	30	0.0500	u
Benzene	1.1791	1.2857	25.00	27.26	ug/L	9	30	0.0500	u
Trichloroethene	0.2784	0.3232	25.00	29.02	ug/L	16	30	0.0500	u
1,2-Dichloropropane	0.3096	0.2953	25.00	23.85	ug/L	-5	20	0.0500	u
Bromodichloromethane	0.3929	0.4569	25.00	29.07	ug/L	16	30	0.0500	u
4-Methyl-2-Pentanone	0.2250	0.1768	25.00	19.65	ug/L	-21	40	0.0500	u
cis-1,3-Dichloropropene	0.4779	0.5609	25.00	29.34	ug/L	17	30	0.0500	u
Toluene	0.7304	0.8743	25.00	29.93	ug/L	20	20	0.0500	u
trans-1,3-Dichloropropene	0.4359	0.4812	25.00	27.60	ug/L	10	30	0.0500	u
1,1,2-Trichloroethane	0.1403	0.1592	25.00	28.36	ug/L	13	30	0.0500	u
2-Hexanone	0.1851	0.1215	25.00	16.42	ug/L	-34	40	0.0500	!c- u
Tetrachloroethene	0.2326	0.3020	25.00	32.46	ug/L	30	30	0.0500	!c+ u
Dibromochloromethane	0.2897	0.3180	25.00	27.45	ug/L	10	30	0.0500	u
Chlorobenzene	0.9227	0.9540	25.00	25.85	ug/L	3	30	0.3000	u
Ethylbenzene	1.5916	1.6640	25.00	26.14	ug/L	5	20	0.0500	u
m,p-Xylenes	0.5692	0.6268	50.00	55.07	ug/L	10	30	0.0500	u
o-Xylene	0.5964	0.6157	25.00	25.81	ug/L	3	30	0.0500	u
Styrene	1.0043	1.0228	25.00	25.46	ug/L	2	30	0.0500	u
Bromoform	0.1546	0.1894	25.00	30.64	ug/L	23	30	0.1000	!c+ u
1,1,2,2-Tetrachloroethane	0.9190	0.7401	25.00	20.13	ug/L	-19	30	0.3000	u
1,2-Dichloroethane-d4	0.3724	0.3694	50.00	49.59	ug/L	-1	30	0.0500	u
Toluene-d8	1.2826	1.3574	50.00	52.92	ug/L	6	30	0.0500	u
Bromofluorobenzene	1.2548	1.1330	50.00	45.14	ug/L	-10	30	0.0500	u

ISTD (ICAL kd112)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1290873	1187794	-7.99	9.64	9.64	0.01
1,4-Difluorobenzene	2394933	2174396	-9.21	10.69	10.69	0.00
Chlorobenzene-d5	2043495	2314786	13.28	14.25	14.25	0.00
1,4-Dichlorobenzene-d4	875369	1133468	29.48	16.68	16.68	0.00

ACM 04/23/09 [Bromomethane]: Corrected baseline noise or negative peak . [general version]

ACM 04/23/09 [1,1-Dichloroethene]: Corrected baseline noise or negative peak . [general version]

ACM 04/23/09 [trans-1,2-Dichloroethene]: Corrected baseline noise or negative peak . [general version]

ACM 04/23/09 [2-Butanone]: Corrected baseline noise or negative peak . [general version]

ACM 04/23/09 [cis-1,2-Dichloroethene]: Corrected baseline noise or negative peak . [general version]

ACM 04/23/09 [1,2-Dibromo-3-Chloropropane]: Corrected baseline noise or negative peak . [general version]

ACM 04/23/09 [Acetone]: Corrected baseline noise or negative peak . [general version]

Analyst: TEW Date: 04/24/09 Reviewer: LW Date: 04/27/09

!=warning +=high bias -=low bias c=CCV m=manual integration u=use v=ICV

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839163249003.6

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839160406

Date : 04/21/09
 Sequence : MSVOA11 kdl

Reference : kd112
 Analyzed : 04/01/09 14:47

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
	ICAL STD	1290873	9.64		2394933	10.69	2043495	14.25	875369	16.68
	LOWER LIMIT	645437	9.14		1197467	10.19	1021748	13.75	437685	16.18
	UPPER LIMIT	2581746	10.14		4789866	11.19	4086990	14.75	1750738	17.18
003	CCV/BS	QC492568	1226232	9.63	2232808	10.69	2278732	14.25	1118065	16.68
004	BSD	QC492569	1279806	9.63	2368028	10.69	2365846	14.25	1124268	16.68
006	BLANK	QC492570	1238064	9.63	2352902	10.69	2283031	14.25	1058621	16.68
007	SAMPLE	211234-006	1182400	9.64	2265612	10.69	2241320	14.25	1037763	16.68
008	SAMPLE	211562-001	1197173	9.63	2271394	10.69	2245399	14.25	1043475	16.68
009	SAMPLE	211289-001	1229730	9.63	2301408	10.69	2295230	14.25	1053479	16.68
010	SAMPLE	211256-001	1261209	9.63	2391734	10.69	2313321	14.25	1077332	16.68
011	SAMPLE	211256-002	1212079	9.63	2322689	10.69	2264632	14.25	1046763	16.68
012	SAMPLE	211266-003	1188938	9.64	2289276	10.69	2249445	14.25	1059222	16.68
013	SAMPLE	211266-006	1188203	9.64	2291718	10.69	2228493	14.25	1048219	16.68
014	SAMPLE	211266-007	1190291	9.63	2268296	10.69	2229453	14.25	1051386	16.68
015	SAMPLE	211543-001	1174976	9.63	2277872	10.69	2238943	14.25	1010053	16.68
016	SAMPLE	211309-006	1144718	9.63	2216580	10.69	2178604	14.25	995959	16.68
017	SAMPLE	211309-007	1143777	9.63	2214027	10.69	2163707	14.25	959517	16.68
018	SAMPLE	211309-004	1180248	9.63	2204301	10.69	2226874	14.25	975527	16.68
019	SAMPLE	211309-005	1138226	9.63	2209115	10.69	2174090	14.25	998440	16.68
020	SAMPLE	211416-001	1124655	9.63	2191390	10.69	2163073	14.25	1010464	16.68
021	SAMPLE	211424-003	1084456	9.63	2121831	10.69	2080769	14.25	927731	16.68
022	SAMPLE	211395-002	1222040	9.64	2202654	10.69	2156224	14.25	962059	16.68
023	SAMPLE	211395-003	1219697	9.64	2188200	10.69	2133367	14.25	958059	16.68
024	SAMPLE	211395-005	1195716	9.63	2186980	10.69	2143065	14.25	1001014	16.68
025	SAMPLE	211395-006	1171247	9.63	2137281	10.69	2123205	14.25	984862	16.68
026	SAMPLE	211543-002	1077028	9.63	2119959	10.69	2112829	14.25	940573	16.68
030	SAMPLE	211582-004	1047390	9.63	2079553	10.69	2063898	14.25	964318	16.68

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839163249

Date : 04/23/09
 Sequence : MSVOA11 kdn

Reference : kd112
 Analyzed : 04/01/09 14:47

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
	ICAL STD	1290873	9.64		2394933	10.69	2043495	14.25	875369	16.68
	LOWER LIMIT	645437	9.14		1197467	10.19	1021748	13.75	437685	16.18
	UPPER LIMIT	2581746	10.14		4789866	11.19	4086990	14.75	1750738	17.18
003	CCV/BS	QC492932	1187794	9.64	2174396	10.69	2314786	14.25	1133468	16.68
004	BSD	QC492933	1250358	9.64	2324221	10.69	2423473	14.25	1183479	16.68
006	BLANK	QC492934	1176442	9.63	2262968	10.69	2284944	14.25	1078067	16.68
007	SAMPLE	211317-005	1162125	9.63	2250377	10.69	2287843	14.25	1108500	16.68
008	SAMPLE	211317-003	1129655	9.63	2185747	10.69	2244165	14.25	1064076	16.68
009	SAMPLE	211317-004	1110406	9.63	2143170	10.69	2188127	14.24	1041008	16.68
010	SAMPLE	211328-002	1124790	9.64	2170311	10.69	2213836	14.25	1060710	16.68
011	SAMPLE	211328-004	1103943	9.64	2141520	10.69	2199083	14.25	1055252	16.68
012	SAMPLE	211416-002	1079835	9.63	2112939	10.69	2169969	14.24	1051797	16.68
013	SAMPLE	211371-006	1081780	9.64	2102156	10.69	2169154	14.25	1012450	16.68
014	SAMPLE	211371-007	1077425	9.64	2120436	10.69	2196033	14.25	1032074	16.68
015	SAMPLE	211596-003	1098583	9.63	2157016	10.69	2203695	14.25	1068323	16.68
016	SAMPLE	211596-001	1082004	9.63	2118147	10.69	2163387	14.25	1001384	16.68
017	SAMPLE	211596-002	1120590	9.63	2095553	10.69	2177542	14.25	1025817	16.68
018	SAMPLE	211369-001	1040321	9.63	2084345	10.69	2122841	14.25	1025940	16.68
019	SAMPLE	211424-001	1063547	9.63	2094357	10.69	2221590	14.25	1058622	16.68
020	SAMPLE	211424-004	1061976	9.63	2092761	10.69	2150422	14.25	1016603	16.68
021	SAMPLE	211470-001	1046700	9.63	2082627	10.69	2144800	14.25	1001535	16.68
022	SAMPLE	211428-001	1096129	9.63	2109582	10.69	2304500	14.24	1119548	16.68
023	SAMPLE	211455-001	1252449	9.64	2429719	10.69	2495682	14.25	1167905	16.68
024	SAMPLE	211455-002	1193748	9.64	2300317	10.69	2378968	14.25	1114677	16.68
025	SAMPLE	211462-001	1109285	9.63	2200406	10.69	2239650	14.25	1068891	16.68
026	SAMPLE	211424-002	1087839	9.63	2154925	10.69	2244467	14.25	1073123	16.68

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839131620

Instrument : MSVOA11
 Method : EPA 8260B

Begun : 04/01/09 09:40
 SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kd101	X	IB			04/01/09 09:40	1.0	1	
002	kd102	TUN	BFB			04/01/09 10:26	1.0	2	
003	kd103	TUN	BFB			04/01/09 10:37	1.0	2	
004	kd104	X	IB			04/01/09 11:02	1.0	1	
005	kd105	IB	CALIB			04/01/09 11:30	1.0	1	
006	kd106	ICAL				04/01/09 11:58	1.0	3 4 5 6 1	
007	kd107	ICAL				04/01/09 12:26	1.0	3 4 5 6 1	
008	kd108	ICAL				04/01/09 12:54	1.0	3 4 5 6 1	
009	kd109	ICAL				04/01/09 13:23	1.0	3 4 5 6 1	
010	kd110	ICAL				04/01/09 13:51	1.0	3 4 5 6 1	
011	kd111	ICAL				04/01/09 14:19	1.0	3 4 5 6 1	
012	kd112	ICAL				04/01/09 14:47	1.0	3 4 5 6 1	
013	kd113	ICAL				04/01/09 15:15	1.0	3 4 5 6 1	
014	kd114	ICAL				04/01/09 15:43	1.0	3 4 5 6 1	
015	kd115	ICV				04/01/09 16:11	1.0	7 1	
016	kd116	ICV				04/01/09 16:39	1.0	8 9 10 1	
017	kd117	X	IB			04/01/09 17:07	1.0	1	
018	kd118	X	IB			04/01/09 17:35	1.0	1	
019	kd119	TUN	BFB			04/01/09 18:12	1.0	2	
020	kd120	CCV				04/01/09 18:29	1.0	3 4 5 6 1	
021	kd121	BS	QC489933	Water	149510	04/01/09 18:58	1.0	8 9 10 7 1	
022	kd122	BSD	QC489934	Water	149510	04/01/09 19:26	1.0	8 9 10 7 1	
023	kd123	X	IB			04/01/09 19:54	1.0	1	
024	kd124	BLANK	QC489954	Water	149510	04/01/09 20:22	1.0	1	
025	kd125	SAMPLE	210905-001	Water	149510	04/01/09 20:50	1.0	1	
026	kd126	SAMPLE	210927-002	Water	149510	04/01/09 21:18	1.0	1	
027	kd127	SAMPLE	210928-002	Water	149510	04/01/09 21:46	1.0	1	
028	kd128	SAMPLE	210929-004	Water	149510	04/01/09 22:14	1.0	1	
029	kd129	SAMPLE	210905-002	Water	149510	04/01/09 22:42	1.0	1	
030	kd130	SAMPLE	210905-003	Water	149510	04/01/09 23:10	1.0	1	
031	kd131	SAMPLE	210905-004	Water	149510	04/01/09 23:38	1.0	1	
032	kd132	SAMPLE	210905-005	Water	149510	04/02/09 00:06	1.0	1	
033	kd133	SAMPLE	210905-006	Water	149510	04/02/09 00:35	1.0	1	
034	kd134	SAMPLE	210927-001	Water	149510	04/02/09 01:03	1.0	1	
035	kd135	SAMPLE	210928-001	Water	149510	04/02/09 01:31	1.0	1	
036	kd136	SAMPLE	210926-001	Water	149510	04/02/09 01:59	1.0	1	
037	kd137	SAMPLE	210929-003	Water	149510	04/02/09 02:27	1.0	1	2:TCE=860
038	kd138	SAMPLE	210838-014	Water	149510	04/02/09 02:55	1.0	1	
039	kd139	SAMPLE	210838-015	Water	149510	04/02/09 03:23	1.0	1	
040	kd140	SAMPLE	210838-016	Water	149510	04/02/09 03:51	1.0	1	
041	kd141	SAMPLE	210838-017	Water	149510	04/02/09 04:19	1.0	1	
042	kd142	SAMPLE	210838-018	Water	149510	04/02/09 04:50	1.0	1	
043	kd143	SAMPLE	210838-011	Water	149510	04/02/09 05:18	1.667	1	
044	kd144	SAMPLE	210838-006	Water	149510	04/02/09 05:46	62.50	1	
045	kd145	X	IB			04/02/09 06:14	1.0	1	
046	kd146	X	IB			04/02/09 06:42	1.0	1	
047	kd147	X	IB			04/02/09 07:10	1.0	1	

ACM 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

ACM 04/02/09 : I verified that the vials loaded on the instrument matched the

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839131620

Instrument : MSVOA11 Begun : 04/01/09 09:40
Method : EPA 8260B SOP Version : TVH_8260B_rv0

sequence data entry, for runs 18 through 47.

ACM 04/03/09 : Matrix spikes were not performed for this analysis in batch 149510 due to insufficient sample amount.

Analyst: ACM Date: 04/01/09 Reviewer: LW Date: 04/02/09

Standards used: 1=S11736 2=S10902 3=S11357 4=S11721 5=S11730 6=S10687 7=S11751 8=S11752 9=S11443 10=S11731

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839160406

Instrument : MSVOA11 Begun : 04/21/09 09:26
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kdl01	X	IB			04/21/09 09:26	1.0	1	
002	kdl02	TUN	BFB			04/21/09 09:50	1.0	2	
003	kdl03	CCV/BS	QC492568	Water	150153	04/21/09 10:03	1.0	3 4 5 6 1	
004	kdl04	BSD	QC492569	Water	150153	04/21/09 10:31	1.0	3 4 5 6 1	
005	kdl05	X	IB			04/21/09 10:59	1.0	1	
006	kdl06	BLANK	QC492570	Water	150153	04/21/09 11:27	1.0	1	
007	kdl07	SAMPLE	211234-006	Water	150153	04/21/09 11:55	1.0	1	
008	kdl08	SAMPLE	211562-001	Water	150153	04/21/09 12:23	1.0	1	
009	kdl09	SAMPLE	211289-001	Water	150153	04/21/09 12:51	1.0	1	
010	kdl10	SAMPLE	211256-001	Water	150153	04/21/09 13:20	1.0	1	
011	kdl11	SAMPLE	211256-002	Water	150153	04/21/09 13:48	1.0	1	
012	kdl12	SAMPLE	211266-003	Water	150153	04/21/09 14:16	1.0	1	
013	kdl13	SAMPLE	211266-006	Water	150153	04/21/09 14:44	1.0	1	
014	kdl14	SAMPLE	211266-007	Water	150153	04/21/09 15:12	1.0	1	
015	kdl15	SAMPLE	211543-001	Water	150153	04/21/09 15:40	1.0	1	
016	kdl16	SAMPLE	211309-006	Water	150153	04/21/09 16:08	1.0	1	
017	kdl17	SAMPLE	211309-007	Water	150153	04/21/09 16:36	1.0	1	
018	kdl18	SAMPLE	211309-004	Water	150153	04/21/09 17:05	1.0	1	
019	kdl19	SAMPLE	211309-005	Water	150153	04/21/09 17:33	1.0	1	
020	kdl20	SAMPLE	211416-001	Water	150153	04/21/09 18:01	1.0	1	headspace <= 1 mL, pH > 2
021	kdl21	SAMPLE	211424-003	Water	150153	04/21/09 18:29	1.0	1	headspace > 1 mL
022	kdl22	SAMPLE	211395-002	Water	150153	04/21/09 18:57	83.33	1	2:THF=2200
023	kdl23	SAMPLE	211395-003	Water	150153	04/21/09 19:25	83.33	1	pH > 2, 2:THF=2200
024	kdl24	SAMPLE	211395-005	Water	150153	04/21/09 19:53	50.0	1	1:MEK=390
025	kdl25	SAMPLE	211395-006	Water	150153	04/21/09 20:22	50.0	1	1:MEK=390
026	kdl26	SAMPLE	211543-002	Water	150153	04/21/09 20:50	500.0	1	pH > 2
027	kdl27	X	IB			04/21/09 21:18	1.0	1	
028	kdl28	X	IB			04/21/09 21:46	1.0	1	
029	kdl29	X	IB			04/21/09 22:14	1.0	1	
030	kdl30	SAMPLE	211582-004	Water	150174	04/21/09 22:42	1.0	1	
031	kdl31	X	IB			04/21/09 23:12	1.0	1	

ACM 04/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 8.

ACM 04/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 9 through 31.

ACM 04/22/09 : Matrix spikes were not performed for this analysis in batch 150153 due to insufficient sample amount.

Analyst: ACM Date: 04/22/09 Reviewer: LW Date: 04/22/09

Standards used: 1=S11736 2=S10902 3=S11752 4=S11859 5=S11731 6=S11751

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839163249

Instrument : MSVOA11 Begun : 04/23/09 08:49
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kdn01	X	IB			04/23/09 08:49	1.0	1	
002	kdn02	TUN	BFB			04/23/09 09:33	1.0	2	
003	kdn03	CCV/BS	QC492932	Water	150243	04/23/09 09:47	1.0	3 4 5 6 1	
004	kdn04	BSD	QC492933	Water	150243	04/23/09 10:15	1.0	3 4 5 6 1	
005	kdn05	X	IB			04/23/09 10:43	1.0	1	
006	kdn06	BLANK	QC492934	Water	150243	04/23/09 11:11	1.0	1	
007	kdn07	SAMPLE	211317-005	Water	150243	04/23/09 11:39	1.0	1	
008	kdn08	SAMPLE	211317-003	Water	150243	04/23/09 12:07	1.0	1	
009	kdn09	SAMPLE	211317-004	Water	150243	04/23/09 12:35	1.0	1	
010	kdn10	SAMPLE	211328-002	Water	150243	04/23/09 13:03	1.0	1	
011	kdn11	SAMPLE	211328-004	Water	150243	04/23/09 13:31	1.0	1	
012	kdn12	SAMPLE	211416-002	Water	150243	04/23/09 13:59	1.0	1	combined (sediment), pH > 2
013	kdn13	SAMPLE	211371-006	Water	150243	04/23/09 14:27	1.0	1	
014	kdn14	SAMPLE	211371-007	Water	150243	04/23/09 14:55	1.0	1	
015	kdn15	SAMPLE	211596-003	Water	150243	04/23/09 15:23	1.0	1	
016	kdn16	SAMPLE	211596-001	Water	150243	04/23/09 15:51	1.0	1	
017	kdn17	SAMPLE	211596-002	Water	150243	04/23/09 16:19	1.0	1	
018	kdn18	SAMPLE	211369-001	Water	150243	04/23/09 16:47	1.0	1	
019	kdn19	SAMPLE	211424-001	Water	150243	04/23/09 17:15	1.0	1	
020	kdn20	SAMPLE	211424-004	Water	150243	04/23/09 17:43	1.0	1	
021	kdn21	SAMPLE	211470-001	Water	150243	04/23/09 18:12	1.0	1	
022	kdn22	SAMPLE	211428-001	Water	150243	04/23/09 18:40	1.0	1	
023	kdn23	SAMPLE	211455-001	Water	150243	04/23/09 19:08	1.0	1	
024	kdn24	SAMPLE	211455-002	Water	150243	04/23/09 19:36	1.0	1	
025	kdn25	SAMPLE	211462-001	Water	150243	04/23/09 20:04	1.0	1	
026	kdn26	SAMPLE	211424-002	Water	150243	04/23/09 20:32	2.0	1	1:TCE=260
027	kdn27	X	IB			04/23/09 21:00	1.0	1	
028	kdn28	X	IB			04/23/09 21:29	1.0	1	
029	kdn29	X	IB			04/23/09 21:57	1.0	1	

ACM 04/23/09 : Matrix spikes were not performed for this analysis in batch 150243 due to insufficient sample amount.

ACM 04/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

ACM 04/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 18 through 29.

Analyst: ACM Date: 04/24/09 Reviewer: LW Date: 04/24/09

Standards used: 1=S11736 2=S10902 3=S11752 4=S11859 5=S11731 6=S11912

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GC/MS VOLATILE ORGANICS

Batch #: 150153

Water Sample Prep Sheet

Sample Number	Sample Vial	pH	Head space?	Shelf	MS#	Dil'n Flask	Comments	Initials & Date
*1 211231-6	B	<2				1	1X 0D	HJL 4/21 12/4/21/09
*2 21268 -5	A	<2	ne yr			-	PA 2-5X on NTF bottom OK @ 1X 6mL H.D 4/21	
3 21289 -1	E	<2					RQ 1X 0D	HJD 4-22
*4 211562 -1	B					1X		
5 21256 -1	A						[F] sc 1/20 flc 32 foot	
6						1X		
7 211266 -3	A					1X		
8	6							
9	7							
10 211543 -1	B						TB	
11								
12 211309 -4	A	K2	not yet		1		500X ATTS sc 1/20	
13	5					1X		
14	6							
15	7							
16 211395 - 2		<2	Lv		2			
17	3							
18	5		<2		3		83X	
19	6				4		TCF	
20 211416 -1	C	4	1mL		5		SOX	
21 211424 -3	A	<2	SmL				1X (RG)	No vials left w/o TBS
22 211582 -4	A						TVH H2O	Run out of vials 6# 150174
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

GC/MS VOLATILE ORGANICS

Batch #: 150243

Water Sample Prep Sheet

Sample Number	Vial	pH	Head space?	Shelf	Dil'n	Flask	MS#	Comments
1 211317 - 3	B	< 2					11	1X in bridge Hold 4-7d
2 11328 - 4	A							1X in bridge Hold 4-7d
3 11328 - 5								1X in bridge Hold 4-7d
4 211369 - 4½	D							1X in bridge Hold 4-7d
5 211371 - 6	B							1X in bridge Hold 4-7d
6 211371 - 7	C							1X in bridge Hold 4-7d
7 211416 - 2	D							1X in bridge Hold 4-7d
8 211424 - 1	C	< 2						1X in bridge Hold 4-7d
9 211424 - 2	A	< 2						1X in bridge Hold 4-7d
10 211424 - 4	A	< 2						1X in bridge Hold 4-7d
11 211429 - 1	B	< 2						1X in bridge Hold 4-7d
12 211429 - 2	A	< 2						1X in bridge Hold 4-7d
13 211429 - 3	B	< 2						1X in bridge Hold 4-7d
14 211428 - 2	Z	Z						1X in bridge Hold 4-7d
15 211428 - 3	Z	Z						1X in bridge Hold 4-7d
16 211428 - 1	B	< 2						1X in bridge Hold 4-7d
17 211455 - 1	K	< 2						1X in bridge Hold 4-7d
18 211470 - 1	C							1X in bridge Hold 4-7d
19 211462 - 1	A							1X in bridge Hold 4-7d
20 211435 - 2	T							1X in bridge Hold 4-7d
21 211396 - 1	C							1X in bridge Hold 4-7d
22 211396 - 2	Z							1X in bridge Hold 4-7d
23 211396 - 3	T							1X in bridge Hold 4-7d
24								1X in bridge Hold 4-7d
25								1X in bridge Hold 4-7d
26								1X in bridge Hold 4-7d
27								1X in bridge Hold 4-7d
28								1X in bridge Hold 4-7d
29								1X in bridge Hold 4-7d
30								1X in bridge Hold 4-7d
31								1X in bridge Hold 4-7d
32								1X in bridge Hold 4-7d
33								1X in bridge Hold 4-7d
34								1X in bridge Hold 4-7d
35								1X in bridge Hold 4-7d

Laboratory Job Number 211416

ANALYTICAL REPORT

Semivolatile Organics by GC/MS

Matrix: Water

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Field ID:	E027	Batch#:	150046
Lab ID:	211416-001	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Prepared:	04/16/09
Diln Fac:	1.000	Analyzed:	04/20/09

Analyte	Result	RL	MDL
Phenol	ND	9.7	
bis(2-Chloroethyl)ether	ND	9.7	
2-Chlorophenol	ND	9.7	
1,3-Dichlorobenzene	ND	9.7	
1,4-Dichlorobenzene	ND	9.7	
Benzyl alcohol	ND	9.7	
1,2-Dichlorobenzene	ND	9.7	
2-Methylphenol	ND	9.7	
bis(2-Chloroisopropyl) ether	ND	9.7	
4-Methylphenol	ND	9.7	
N-Nitroso-di-n-propylamine	ND	9.7	
Hexachloroethane	ND	9.7	
Nitrobenzene	ND	9.7	
Isophorone	ND	9.7	
2-Nitrophenol	ND	19	5.9
2,4-Dimethylphenol	ND	9.7	
Benzoic acid	ND	49	
bis(2-Chloroethoxy)methane	ND	9.7	
2,4-Dichlorophenol	ND	9.7	
1,2,4-Trichlorobenzene	ND	9.7	
Naphthalene	ND	9.7	
4-Chloroaniline	ND	9.7	
Hexachlorobutadiene	ND	9.7	
4-Chloro-3-methylphenol	ND	9.7	
2-Methylnaphthalene	ND	9.7	
Hexachlorocyclopentadiene	ND	19	
2,4,6-Trichlorophenol	ND	9.7	
2,4,5-Trichlorophenol	ND	9.7	
2-Chloronaphthalene	ND	9.7	
2-Nitroaniline	ND	19	
Dimethylphthalate	ND	9.7	
Acenaphthylene	ND	9.7	
2,6-Dinitrotoluene	ND	9.7	
3-Nitroaniline	ND	19	
Acenaphthene	ND	9.7	
2,4-Dinitrophenol	ND	19	
4-Nitrophenol	ND	19	
Dibenzofuran	ND	9.7	
2,4-Dinitrotoluene	ND	9.7	
Diethylphthalate	ND	9.7	
Fluorene	ND	9.7	
4-Chlorophenyl-phenylether	ND	9.7	
4-Nitroaniline	ND	19	
4,6-Dinitro-2-methylphenol	ND	19	
N-Nitrosodiphenylamine	ND	9.7	
4-Bromophenyl-phenylether	ND	9.7	
Hexachlorobenzene	ND	9.7	
Pentachlorophenol	ND	19	
Phenanthrene	ND	9.7	
Anthracene	ND	9.7	
Di-n-butylphthalate	ND	9.7	
Fluoranthene	ND	9.7	

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Field ID:	E027	Batch#:	150046
Lab ID:	211416-001	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Prepared:	04/16/09
Diln Fac:	1.000	Analyzed:	04/20/09

Analyte	Result	RL	MDL
Pyrene	ND	9.7	
Butylbenzylphthalate	ND	9.7	
3,3'-Dichlorobenzidine	ND	19	
Benzo(a)anthracene	ND	9.7	
Chrysene	ND	9.7	
bis(2-Ethylhexyl)phthalate	ND	9.7	
Di-n-octylphthalate	ND	9.7	
Benzo(b)fluoranthene	ND	9.7	
Benzo(k)fluoranthene	ND	9.7	
Benzo(a)pyrene	ND	9.7	
Indeno(1,2,3-cd)pyrene	ND	9.7	
Dibenz(a,h)anthracene	ND	9.7	
Benzo(g,h,i)perylene	ND	9.7	

Surrogate	%REC	Limits
2-Fluorophenol	72	21-120
Phenol-d5	72	10-120
2,4,6-Tribromophenol	78	10-123
Nitrobenzene-d5	65	36-120
2-Fluorobiphenyl	59	43-120
Terphenyl-d14	14 *	33-141

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Field ID:	E026	Batch#:	150046
Lab ID:	211416-002	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Prepared:	04/16/09
Diln Fac:	1.000	Analyzed:	04/20/09

Analyte	Result	RL	MDL
Phenol	ND	9.4	
bis(2-Chloroethyl)ether	ND	9.4	
2-Chlorophenol	ND	9.4	
1,3-Dichlorobenzene	ND	9.4	
1,4-Dichlorobenzene	ND	9.4	
Benzyl alcohol	ND	9.4	
1,2-Dichlorobenzene	ND	9.4	
2-Methylphenol	ND	9.4	
bis(2-Chloroisopropyl) ether	ND	9.4	
4-Methylphenol	ND	9.4	
N-Nitroso-di-n-propylamine	ND	9.4	
Hexachloroethane	ND	9.4	
Nitrobenzene	ND	9.4	
Isophorone	ND	9.4	
2-Nitrophenol	ND	19	5.7
2,4-Dimethylphenol	ND	9.4	
Benzoic acid	ND	47	
bis(2-Chloroethoxy)methane	ND	9.4	
2,4-Dichlorophenol	ND	9.4	
1,2,4-Trichlorobenzene	ND	9.4	
Naphthalene	ND	9.4	
4-Chloroaniline	ND	9.4	
Hexachlorobutadiene	ND	9.4	
4-Chloro-3-methylphenol	ND	9.4	
2-Methylnaphthalene	ND	9.4	
Hexachlorocyclopentadiene	ND	19	
2,4,6-Trichlorophenol	ND	9.4	
2,4,5-Trichlorophenol	ND	9.4	
2-Chloronaphthalene	ND	9.4	
2-Nitroaniline	ND	19	
Dimethylphthalate	ND	9.4	
Acenaphthylene	ND	9.4	
2,6-Dinitrotoluene	ND	9.4	
3-Nitroaniline	ND	19	
Acenaphthene	ND	9.4	
2,4-Dinitrophenol	ND	19	
4-Nitrophenol	ND	19	
Dibenzofuran	ND	9.4	
2,4-Dinitrotoluene	ND	9.4	
Diethylphthalate	ND	9.4	
Fluorene	ND	9.4	
4-Chlorophenyl-phenylether	ND	9.4	
4-Nitroaniline	ND	19	
4,6-Dinitro-2-methylphenol	ND	19	
N-Nitrosodiphenylamine	ND	9.4	
4-Bromophenyl-phenylether	ND	9.4	
Hexachlorobenzene	ND	9.4	
Pentachlorophenol	ND	19	
Phenanthrene	ND	9.4	
Anthracene	ND	9.4	
Di-n-butylphthalate	ND	9.4	
Fluoranthene	ND	9.4	

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Field ID:	E026	Batch#:	150046
Lab ID:	211416-002	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	ug/L	Prepared:	04/16/09
Diln Fac:	1.000	Analyzed:	04/20/09

Analyte	Result	RL	MDL
Pyrene	ND	9.4	
Butylbenzylphthalate	ND	9.4	
3,3'-Dichlorobenzidine	ND	19	
Benzo(a)anthracene	ND	9.4	
Chrysene	ND	9.4	
bis(2-Ethylhexyl)phthalate	ND	9.4	
Di-n-octylphthalate	ND	9.4	
Benzo(b)fluoranthene	ND	9.4	
Benzo(k)fluoranthene	ND	9.4	
Benzo(a)pyrene	ND	9.4	
Indeno(1,2,3-cd)pyrene	ND	9.4	
Dibenz(a,h)anthracene	ND	9.4	
Benzo(g,h,i)perylene	ND	9.4	

Surrogate	%REC	Limits
2-Fluorophenol	71	21-120
Phenol-d5	75	10-120
2,4,6-Tribromophenol	71	10-123
Nitrobenzene-d5	50	36-120
2-Fluorobiphenyl	51	43-120
Terphenyl-d14	13 *	33-141

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC492132	Batch#:	150046
Matrix:	Water	Prepared:	04/16/09
Units:	ug/L	Analyzed:	04/17/09

Analyte	Result	RL	MDL
Phenol	ND	10	
bis(2-Chloroethyl)ether	ND	10	
2-Chlorophenol	ND	10	
1,3-Dichlorobenzene	ND	10	
1,4-Dichlorobenzene	ND	10	
Benzyl alcohol	ND	10	
1,2-Dichlorobenzene	ND	10	
2-Methylphenol	ND	10	
bis(2-Chloroisopropyl) ether	ND	10	
4-Methylphenol	ND	10	
N-Nitroso-di-n-propylamine	ND	10	
Hexachloroethane	ND	10	
Nitrobenzene	ND	10	
Isophorone	ND	10	
2-Nitrophenol	ND	20	4.4
2,4-Dimethylphenol	ND	10	
Benzoic acid	ND	50	
bis(2-Chloroethoxy)methane	ND	10	
2,4-Dichlorophenol	ND	10	
1,2,4-Trichlorobenzene	ND	10	
Naphthalene	ND	10	
4-Chloroaniline	ND	10	
Hexachlorobutadiene	ND	10	
4-Chloro-3-methylphenol	ND	10	
2-Methylnaphthalene	ND	10	
Hexachlorocyclopentadiene	ND	20	
2,4,6-Trichlorophenol	ND	10	
2,4,5-Trichlorophenol	ND	10	
2-Chloronaphthalene	ND	10	
2-Nitroaniline	ND	20	
Dimethylphthalate	ND	10	
Acenaphthylene	ND	10	
2,6-Dinitrotoluene	ND	10	
3-Nitroaniline	ND	20	
Acenaphthene	ND	10	
2,4-Dinitrophenol	ND	20	
4-Nitrophenol	ND	20	
Dibenzofuran	ND	10	
2,4-Dinitrotoluene	ND	10	
Diethylphthalate	ND	10	
Fluorene	ND	10	
4-Chlorophenyl-phenylether	ND	10	
4-Nitroaniline	ND	20	
4,6-Dinitro-2-methylphenol	ND	20	
N-Nitrosodiphenylamine	ND	10	
4-Bromophenyl-phenylether	ND	10	
Hexachlorobenzene	ND	10	
Pentachlorophenol	ND	20	
Phenanthrene	ND	10	
Anthracene	ND	10	
Di-n-butylphthalate	ND	10	
Fluoranthene	ND	10	
Pyrene	ND	10	

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC492132	Batch#:	150046
Matrix:	Water	Prepared:	04/16/09
Units:	ug/L	Analyzed:	04/17/09

Analyte	Result	RL	MDL
Butylbenzylphthalate	ND	10	
3,3'-Dichlorobenzidine	ND	20	
Benzo(a)anthracene	ND	10	
Chrysene	ND	10	
bis(2-Ethylhexyl)phthalate	ND	10	
Di-n-octylphthalate	ND	10	
Benzo(b)fluoranthene	ND	10	
Benzo(k)fluoranthene	ND	10	
Benzo(a)pyrene	ND	10	
Indeno(1,2,3-cd)pyrene	ND	10	
Dibenz(a,h)anthracene	ND	10	
Benzo(g,h,i)perylene	ND	10	

Surrogate	%REC	Limits
2-Fluorophenol	80	21-120
Phenol-d5	72	10-120
2,4,6-Tribromophenol	73	10-123
Nitrobenzene-d5	79	36-120
2-Fluorobiphenyl	78	43-120
Terphenyl-d14	76	33-141

ND= Not Detected
 RL= Reporting Limit
 MDL= Method Detection Limit

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Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	150046
Units:	ug/L	Prepared:	04/16/09
Diln Fac:	1.000	Analyzed:	04/17/09

Type: BS Lab ID: QC492133

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	54.93	69	17-120
2-Chlorophenol	80.00	59.25	74	46-120
1,4-Dichlorobenzene	80.00	45.48	57	38-120
N-Nitroso-di-n-propylamine	80.00	66.11	83	42-120
1,2,4-Trichlorobenzene	80.00	47.54	59	39-120
4-Chloro-3-methylphenol	80.00	66.63	83	54-120
Acenaphthene	30.00	23.02	77	49-120
4-Nitrophenol	80.00	69.81	87	10-120
2,4-Dinitrotoluene	80.00	66.43	83	48-120
Pentachlorophenol	80.00	69.63	87	13-153
Pyrene	30.00	20.77	69	57-150

Surrogate	%REC	Limits
2-Fluorophenol	77	21-120
Phenol-d5	72	10-120
2,4,6-Tribromophenol	84	10-123
Nitrobenzene-d5	73	36-120
2-Fluorobiphenyl	73	43-120
Terphenyl-d14	66	33-141

Type: BSD Lab ID: QC492134

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Phenol	80.00	55.49	69	17-120	1 29
2-Chlorophenol	80.00	58.81	74	46-120	1 28
1,4-Dichlorobenzene	80.00	47.18	59	38-120	4 28
N-Nitroso-di-n-propylamine	80.00	70.75	88	42-120	7 18
1,2,4-Trichlorobenzene	80.00	47.83	60	39-120	1 25
4-Chloro-3-methylphenol	80.00	68.07	85	54-120	2 25
Acenaphthene	30.00	23.21	77	49-120	1 16
4-Nitrophenol	80.00	67.03	84	10-120	4 50
2,4-Dinitrotoluene	80.00	65.03	81	48-120	2 15
Pentachlorophenol	80.00	70.90	89	13-153	2 45
Pyrene	30.00	20.28	68	57-150	2 24

Surrogate	%REC	Limits
2-Fluorophenol	76	21-120
Phenol-d5	73	10-120
2,4,6-Tribromophenol	82	10-123
Nitrobenzene-d5	74	36-120
2-Fluorobiphenyl	73	43-120
Terphenyl-d14	64	33-141

RPD= Relative Percent Difference

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CURTIS & TOMPKINS DFTPP TUNE FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA06 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 559133207007 File : yd207 Time : 02-APR-2009 18:16

Standards: S11410

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	86505	45.54	
68	< 2% of mass 69	0	0.00	
69		71477	100.00	
70	< 2% of mass 69	450	0.63	
127	40% - 60% of mass 198	102826	54.13	
197	< 1% of mass 198	0	0.00	
198		189973	100.00	
199	5% - 9% of mass 198	12734	6.70	
275	10% - 30% of mass 198	42813	22.54	
365	> 1% of mass 198	5670	2.98	
441	Present, < mass 443	24152	83.70	
442	> 40% and < 100% of mass 198	147178	77.47	
443	17% - 23% of mass 442	28856	19.61	

Analyst: SHD Date: 04/03/09 Reviewer: LW Date: 04/03/09
Page 1 of 1 559133207007

PEM Report

File Name : G:\csinput.net\DATA\040209\YD207.D
Date Acquired : 2 Apr 2009 6:16 pm
Sample Name : TUN,S11410
Misc. Info : DFTPP/PEM 50ug/ml
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.149	3.83	288387
Benzidine	0.681	5.60	1700305
4,4'-DDT		6.59	1104550
4,4'-DDE		5.84	2702
4,4'-DDD		6.24	77344
% Breakdown 4,4'-DDT			6.76%

CURTIS & TOMPKINS DFTPP TUNE FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA06 Run Name : DFTTP/PEM IDF : 1.0
Seqnum : 559154997005 File : ydh05 Time : 17-APR-2009 17:11

Standards: S11410

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	94631	49.29	
68	< 2% of mass 69	0	0.00	
69		77024	100.00	
70	< 2% of mass 69	408	0.53	
127	40% - 60% of mass 198	108781	56.66	
197	< 1% of mass 198	0	0.00	
198		192000	100.00	
199	5% - 9% of mass 198	13541	7.05	
275	10% - 30% of mass 198	42309	22.04	
365	> 1% of mass 198	5463	2.85	
441	Present, < mass 443	21704	78.75	
442	> 40% and < 100% of mass 198	137744	71.74	
443	17% - 23% of mass 442	27560	20.01	

Analyst: LLH Date: 04/20/09 Reviewer: SHD Date: 04/23/09
Page 1 of 1 559154997005

PEM Report

File Name : G:\msbna06\041709\YDH05.D
Date Acquired : 17 Apr 2009 5:11 pm
Sample Name : TUN,S11410
Misc. Info : DFTTP/PEM
Calib. Title : MSBNA06 BNA DFTPP/PEM
Inst. Name : MSBNA06
AcquisitionMeth: DFTPP06.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	0.645	3.82	469553
Benzidine	0.531	5.60	1986383
4,4'-DDT		6.59	1167831
4,4'-DDE		5.84	2178
4,4'-DDD		6.23	58939
% Breakdown 4,4'-DDT			4.97%

CURTIS & TOMPKINS DFTPP TUNE FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA07 Run Name : DFTPP/PEM 50 UG/ML IDF : 1.0
Seqnum : 569102964005 File : zcc05 Time : 12-MAR-2009 15:02

Standards: S11410

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	238868	38.86	
68	< 2% of mass 69	3863	1.54	
69		251098	100.00	
70	< 2% of mass 69	1274	0.51	
127	40% - 60% of mass 198	311210	50.63	
197	< 1% of mass 198	949	0.15	
198		614656	100.00	
199	5% - 9% of mass 198	40829	6.64	
275	10% - 30% of mass 198	156906	25.53	
365	> 1% of mass 198	17974	2.92	
441	Present, < mass 443	76930	80.82	
442	> 40% and < 100% of mass 198	498048	81.03	
443	17% - 23% of mass 442	95189	19.11	

SHD 03/13/09 : Combined split peak .

Analyst: SHD Date: 03/13/09 Reviewer: LW Date: 03/16/09
Page 1 of 1 569102964005

PEM Report

File Name : G:\msbna07\031209\ZCC05.D
Date Acquired : 12 Mar 2009 3:02 pm
Sample Name : TUN,S11410
Misc. Info : DFTPP/PEM 50 ug/ml
Calib. Title : MSBNA07 BNA DFTPP/PEM
Inst. Name : MSBNA07
AcquisitionMeth: DFTPP07.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.343	5.69	700790
Benzidine	1.026	7.55	4098790
4,4'-DDT		8.59	2299168
4,4'-DDE		7.79	3422
4,4'-DDD		8.26	74395
% Breakdown 4,4'-DDT			3.27%

CURTIS & TOMPKINS DFTPP TUNE FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA07 Run Name : DFTPP/PEM 50 UG/ML IDF : 1.0
Seqnum : 569104310001 File : zcd01 Time : 13-MAR-2009 10:30

Standards: S11410

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	252089	39.75	
68	< 2% of mass 69	4468	1.68	
69		265640	100.00	
70	< 2% of mass 69	1403	0.53	
127	40% - 60% of mass 198	322858	50.91	
197	< 1% of mass 198	2813	0.44	
198		634218	100.00	
199	5% - 9% of mass 198	42445	6.69	
275	10% - 30% of mass 198	154896	24.42	
365	> 1% of mass 198	16417	2.59	
441	Present, < mass 443	82456	73.09	
442	> 40% and < 100% of mass 198	569280	89.76	
443	17% - 23% of mass 442	112808	19.82	

SHD 03/16/09 : Combined split peak .

Analyst: SHD Date: 03/16/09 Reviewer: LW Date: 03/16/09
Page 1 of 1 569104310001

PEM Report

File Name : G:\msbna07\031309\ZCD01.D
Date Acquired : 13 Mar 2009 10:30 am
Sample Name : TUN,S11410
Misc. Info : DFTPP/PEM 50 ug/ml
Calib. Title : MSBNA07 BNA DFTPP/PEM
Inst. Name : MSBNA07
AcquisitionMeth: DFTPP07.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.116	5.69	767518
Benzidine	0.800	7.55	4454713
4,4'-DDT		8.58	2096683
4,4'-DDE		7.79	6498
4,4'-DDD		8.21	146999
% Breakdown 4,4'-DDT			6.82%

CURTIS & TOMPKINS DFTPP TUNE FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA07 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 569158981001 File : zdk01 Time : 20-APR-2009 09:41

Standards: S11410

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	199424	44.43	
68	< 2% of mass 69	0	0.00	
69		200768	100.00	
70	< 2% of mass 69	1277	0.64	
127	40% - 60% of mass 198	240640	53.61	
197	< 1% of mass 198	0	0.00	
198		448832	100.00	
199	5% - 9% of mass 198	31632	7.05	
275	10% - 30% of mass 198	110288	24.57	
365	> 1% of mass 198	14319	3.19	
441	Present, < mass 443	64432	75.32	
442	> 40% and < 100% of mass 198	428224	95.41	
443	17% - 23% of mass 442	85544	19.98	

Analyst: LLH Date: 04/20/09 Reviewer: SHD Date: 04/23/09
Page 1 of 1 569158981001

PEM Report

File Name : G:\csinput.net\DATA\042009\ZDK01.D
Date Acquired : 20 Apr 2009 9:41 am
Sample Name : TUN,S11410
Misc. Info : DFTPP/PEM 50ug/ml
Calib. Title : MSBNA07 BNA DFTPP/PEM
Inst. Name : MSBNA07
AcquisitionMeth: DFTPP07.M

Compound Name	Tailing Factor	RT	Area
Pentachlorophenol	1.813	4.06	556905
Benzidine	0.866	5.87	3792610
4,4'-DDT		6.87	2059598
4,4'-DDE		6.10	8912
4,4'-DDD		6.51	132057
% Breakdown 4,4'-DDT			6.41%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 MSBNA Water: EPA 8270C

Inst : MSBNA06
 Calnum : 559133207001
 Units : ug/mL

Name : 6PTBNA6
 Date : 02-APR-2009 18:38
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	yd208	559133207008	ICAL #1	02-APR-2009 18:38	S11781
L2	yd209	559133207009	ICAL #2	02-APR-2009 19:15	S11782
L3	yd210	559133207010	ICAL #3	02-APR-2009 19:52	S11783
L4	yd211	559133207011	ICAL #4	02-APR-2009 20:29	S11784
L5	yd212	559133207012	ICAL #5	02-APR-2009 21:06	S11785
L6	yd213	559133207013	ICAL #6	02-APR-2009 21:46	S11786
L7	yd214	559133207014	ICAL #7	02-APR-2009 22:29	S11787
L8	yd215	559133207015	ICAL #8	02-APR-2009 23:07	S11788

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	Flg
Phenol		1.3578	1.4322	1.4615	1.4971	1.4650	1.4568	1.4017	AVRG		0.69499		1.4389	3	15	0.05	0.99	
bis(2-Chloroethyl)ether		1.0211m	0.9926m	1.0105	0.9771	0.9624	0.9687m	0.9499m	AVRG		1.01709		0.9832	3	15	0.05	0.99	
2-Chlorophenol		1.2964	1.3198	1.3457	1.3187	1.3454	1.3106	1.2739	AVRG		0.76000		1.3158	2	15	0.05	0.99	
1,3-Dichlorobenzene		1.6184	1.5762	1.5829	1.5658	1.5318	1.4906	1.4432	AVRG		0.64761		1.5441	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.4593	1.4523	1.4918	1.4727	1.4786	1.4392	1.3779	AVRG		0.68819		1.4531	3	15	0.05	0.99	
Benzyl alcohol		0.5697	0.6207	0.7025	0.7458	0.7509	0.7642	0.7305	AVRG		1.43315		0.6978	11	15	0.05	0.99	
1,2-Dichlorobenzene		1.4402	1.3930	1.4305	1.4437	1.4169	1.3750	1.3336	AVRG		0.71189		1.4047	3	15	0.05	0.99	
2-Methylphenol		0.7498	0.7895	0.8182	0.8380	0.8389	0.8286	0.8061	AVRG		1.23475		0.8099	4	15	0.05	0.99	
bis(2-Chloroisopropyl) ether		1.4405	1.3600	1.4314	1.4169m	1.4072	1.3873	1.3712	AVRG		0.71323		1.4021	2	15	0.05	0.99	
4-Methylphenol		1.0318	1.0820	1.1556	1.2279	1.2195	1.2001	1.1686m	AVRG		0.86575		1.1551	6	15	0.05	0.99	
N-Nitroso-di-n-propylamine		0.5683	0.6000	0.6003	0.6473	0.6387m	0.6041m	0.5849m	AVRG		1.64956		0.6062	5	15	0.050	0.99	
Hexachloroethane		0.5963	0.5765	0.5677	0.5678	0.5407	0.4914	0.4571	AVRG		1.84325		0.5425	9	15	0.05	0.99	
Nitrobenzene		0.2660	0.2574	0.2644	0.2642	0.2648	0.2628m	0.2550	AVRG		3.81518		0.2621	2	15	0.05	0.99	
Isophorone		0.5300	0.5356	0.5303	0.5202	0.5271	0.5284	0.5142m	AVRG		1.89914		0.5266	1	15	0.05	0.99	
2-Nitrophenol			0.1792m	0.1855	0.1974	0.1998	0.1958	0.1980m	AVRG		5.19232		0.1926	4	15	0.05	0.99	
2,4-Dimethylphenol		0.2926	0.2951	0.3006	0.3019	0.2873	0.2822	0.2788	AVRG		3.43386		0.2912	3	15	0.05	0.99	
bis(2-Chloroethoxy)methane			0.3047	0.3244	0.3337	0.3324	0.3248	0.3276	AVRG		3.08066		0.3246	3	15	0.05	0.99	
Benzoic acid		0.1149m	0.1299	0.1550	0.1788	0.1954	0.2058	0.2115	LINR	29.9605	3.85064		0.1702	0.999	15	0.05	0.99	
2,4-Dichlorophenol		0.2931	0.2907	0.3029	0.2994	0.2989	0.2894	0.2836	AVRG		3.40141		0.2940	2	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.3370	0.3294	0.3328	0.3196	0.3205	0.3165	0.3072	AVRG		3.09323		0.3233	3	15	0.05	0.99	
Naphthalene	0.9424	0.9246	0.9398	0.9293	0.9532	0.9533	0.9362	0.9147	AVRG		1.06759		0.9367	1	15	0.05	0.99	
4-Chloroaniline		0.2718	0.3799	0.4285m	0.4348	0.4417m	0.4382m	0.4251m	AVRG		2.48234		0.4028	15	15	0.05	0.99	
Hexachlorobutadiene		0.1832	0.1744	0.1807	0.1731	0.1736	0.1728	0.1733	AVRG		5.68652		0.1759	2	15	0.05	0.99	
4-Chloro-3-methylphenol		0.2871	0.2801	0.2877	0.2732	0.2688	0.2637	0.2505	AVRG		3.66257		0.2730	5	15	0.05	0.99	
2-Methylnaphthalene	0.6260	0.6697	0.7039	0.7250	0.7153	0.7056	0.6886	0.6778	AVRG		1.45142		0.6890	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	Flg	
Hexachlorocyclopentadiene			0.3444	0.3423	0.3796	0.3917	0.3714	0.3698	AVRG		2.72830		0.3665	5	15	0.050	0.99		
2,4,6-Trichlorophenol		0.3677	0.3932	0.3931	0.4037	0.4108	0.3944	0.3889	AVRG		2.54371		0.3931	3	15	0.05	0.99		
2,4,5-Trichlorophenol		0.4242m	0.4495	0.4310	0.4181	0.4343	0.4121m	0.4025m	AVRG		2.35559		0.4245	4	15	0.05	0.99		
2-Chloronaphthalene			1.2257	1.1937	1.1770	1.1961	1.1196	1.1112	AVRG		0.85430		1.1705	4	15	0.05	0.99		
2-Nitroaniline			0.3051	0.3024	0.3058	0.3148m	0.2960	0.2863	AVRG		3.31425		0.3017	3	15	0.05	0.99		
Dimethylphthalate		1.4044	1.4954	1.5261	1.5243	1.5005	1.3726	1.3167	AVRG		0.69034		1.4486	6	15	0.05	0.99		
2,6-Dinitrotoluene			0.2820	0.3239	0.3239	0.3246	0.3135	0.2827	0.2898	AVRG		3.27029		0.3058	7	15	0.05	0.99	
Acenaphthylene	1.9155	1.9236	2.0172	1.9697	1.9528	1.9011	1.7244	1.7042	AVRG		0.52950		1.8886	6	15	0.05	0.99		
3-Nitroaniline			0.2901m	0.3064	0.3527m	0.3507m	0.3456m	0.3222	AVRG		3.04939		0.3279	8	15	0.05	0.99		
Acenaphthene	1.1011	1.0479	1.1002	1.0914	1.0954	1.0902	1.0458	1.0171	AVRG		0.93141		1.0736	3	15	0.05	0.99		
2,4-Dinitrophenol			0.0593m	0.0939m	0.1391m	0.1713m	0.1775m	0.1758m	LINR	14.0557	5.08425		0.1362	0.998	15	0.050	0.99		
4-Nitrophenol			0.1566m	0.1673	0.1807	0.1823m	0.1701m	0.1602	AVRG		5.89845		0.1695	6	15	0.050	0.99		
Dibenzofuran			1.6618	1.6916m	1.6989m	1.7299	1.6233	1.6102	AVRG		0.59906		1.6693	3	15	0.05	0.99		
2,4-Dinitrotoluene		0.3866	0.4406	0.4503	0.4445	0.4352	0.4019	0.3828	AVRG		2.37935		0.4203	7	15	0.05	0.99		
Diethylphthalate			1.6529	1.6805	1.6979	1.6292	1.5110	1.4384	AVRG		0.62435		1.6017	6	15	0.05	0.99		
Fluorene	1.3312	1.3223	1.3788	1.3836	1.4071	1.4181	1.3254	1.2833	AVRG		0.73735		1.3562	3	15	0.05	0.99		
4-Chlorophenyl-phenylether			0.6557	0.6460	0.6510	0.6497	0.6221	0.6193	AVRG		1.56096		0.6406	2	15	0.05	0.99		
4-Nitroaniline			0.2690	0.3028m	0.3213	0.3366m	0.3147m	0.3005m	AVRG		3.25254		0.3075	7	15	0.05	0.99		
4,6-Dinitro-2-methylphenol			0.0755	0.0918m	0.1120m	0.1177m	0.1204m	0.1210	LINR	7.59472	7.81607		0.1064	1.000	15	0.05	0.99		
N-Nitrosodiphenylamine			0.5096	0.5050	0.5162	0.5249	0.5198	0.5160	AVRG		1.94077		0.5153	1	15	0.05	0.99		
4-Bromophenyl-phenylether			0.2017	0.2076	0.2221	0.2228	0.2228	0.2258	AVRG		4.60565		0.2171	5	15	0.05	0.99		
Hexachlorobenzene		0.2177	0.2182	0.2190	0.2234	0.2243	0.2212	0.2178	AVRG		4.54055		0.2202	1	15	0.05	0.99		
Pentachlorophenol			0.1115m	0.1265m	0.1417	0.1487	0.1535	0.1537	AVRG		7.17962		0.1393	12	15	0.05	0.99		
Phenanthrene	1.0791	1.0390	1.0765	1.0561	1.0514	1.0265	1.0361	1.0087	AVRG		0.95541		1.0467	2	15	0.05	0.99		
Anthracene	1.0555	1.0624	1.1018	1.0780	1.0785	1.0520	1.0417	1.0013	AVRG		0.94438		1.0589	3	15	0.05	0.99		
Di-n-butylphthalate			1.5231	1.4950	1.4375	1.3377	1.2756	1.2020	AVRG		0.72544		1.3785	9	15	0.05	0.99		
Fluoranthene	1.2195	1.2552	1.2317	1.1916	1.1403	1.0709	1.0584	1.0160	AVRG		0.87112		1.1479	8	15	0.05	0.99		
Pyrene	1.3708	1.4057	1.4547	1.3970	1.4147	1.3040	1.2439	1.2426	AVRG		0.73846		1.3542	6	15	0.05	0.99		
Butylbenzylphthalate			0.6884	0.6958	0.7201	0.7099	0.6824	0.6714	AVRG		1.43957		0.6947	3	15	0.05	0.99		
3,3'-Dichlorobenzidine			0.2679	0.3069	0.3652	0.3953	0.3988	0.4021	LINR	7.30217	2.35927		0.3560	1.000	15	0.05	0.99		
Benzo(a)anthracene	1.0935	1.1000	1.1344	1.1165	1.1633	1.1486	1.1476	1.1308	AVRG		0.88547		1.1293	2	15	0.05	0.99		
bis(2-Ethylhexyl)phthalate			0.8512	0.8459	0.9040	0.8881	0.8491	0.8325	AVRG		1.16037		0.8618	3	15	0.05	0.99		
Chrysene	0.9676	0.9500	0.9258	0.9343	0.9781	0.9923	0.9677	0.9657m	AVRG		1.04146		0.9602	2	15	0.05	0.99		
Di-n-octylphthalate			1.7484	1.7941	1.7971	1.7981	1.8489	1.8937	AVRG		0.55145		1.8134	3	15	0.05	0.99		
Benzo(b)fluoranthene	1.0206	1.1109	1.1908	1.1573	1.1999	1.2865	1.2675	1.3603	AVRG		0.83388		1.1992	9	15	0.05	0.99		
Benzo(k)fluoranthene	1.0308m	1.1192m	1.1758	1.2247	1.1752	1.1036	1.1472	1.1219	AVRG		0.87927		1.1373	5	15	0.05	0.99		
Benzo(a)pyrene	0.7783	0.8175	0.9165	0.9055m	0.9275m	0.9481m	0.9509m	0.9778m	AVRG		1.10771		0.9028	8	15	0.05	0.99		
Indeno(1,2,3-cd)pyrene	0.9172m	0.8965m	1.0307m	1.0850m	1.1152m	1.1843m	1.0391m	1.0072m	AVRG		0.96674		1.0344	9	15	0.05	0.99		
Dibenz(a,h)anthracene	0.6944	0.7183	0.7995m	0.8130m	0.8398	0.8734	0.7736	0.7899	AVRG		1.26943		0.7878	8	15	0.05	0.99		
Benzo(g,h,i)perylene	0.7964	0.7598	0.7658	0.7970	0.8263	0.9145	0.7522	0.7462	AVRG		1.25821		0.7948	7	15	0.05	0.99		
2-Fluorophenol		0.9284	1.0073	1.1049	1.2089	1.2427	1.2651	1.2249	AVRG		0.87696		1.1403	11	15	0.05	0.99		

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	
														%RSD	%RSD	RF	r^2	Flg
Phenol-d5		1.2112	1.3385	1.4008	1.4427	1.4420	1.4472	1.3604	AVRG		0.72592		1.3776	6	15	0.05	0.99	
Nitrobenzene-d5		0.2732	0.2771	0.2737	0.2819	0.2840	0.2853	0.2811m	AVRG		3.57812		0.2795	2	15	0.05	0.99	
2-Fluorobiphenyl		1.3112	1.3906	1.3946	1.3805	1.3214	1.2693	1.2427	AVRG		0.75185		1.3301	5	15	0.05	0.99	
2,4,6-Tribromophenol		0.1581	0.1776	0.1862	0.1989	0.2085	0.1948	0.1957	AVRG		5.30366		0.1885	9	15	0.05	0.99	
Terphenyl-d14		0.8525	0.8731	0.8677	0.8729	0.8529	0.8479	0.8382	AVRG		1.16565		0.8579	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Phenol			10.00	-6	20.00	0	32.00	2	50.00	4	80.00	2	120.0	1	160.0	-3
bis(2-Chloroethyl)ether			10.00	4	20.00	1	32.00	3	50.00	-1	80.00	-2	120.0	-1	160.0	-3
2-Chlorophenol			10.00	-1	20.00	0	32.00	2	50.00	0	80.00	2	120.0	0	160.0	-3
1,3-Dichlorobenzene			10.00	5	20.00	2	32.00	3	50.00	1	80.00	-1	120.0	-3	160.0	-7
1,4-Dichlorobenzene			10.00	0	20.00	0	32.00	3	50.00	1	80.00	2	120.0	-1	160.0	-5
Benzyl alcohol			10.00	-18	20.00	-11	32.00	1	50.00	7	80.00	8	120.0	10	160.0	5
1,2-Dichlorobenzene			10.00	3	20.00	-1	32.00	2	50.00	3	80.00	1	120.0	-2	160.0	-5
2-Methylphenol			10.00	-7	20.00	-3	32.00	1	50.00	3	80.00	4	120.0	2	160.0	0
bis(2-Chloroisopropyl) ether			10.00	3	20.00	-3	32.00	2	50.00	1	80.00	0	120.0	-1	160.0	-2
4-Methylphenol			10.00	-11	20.00	-6	32.00	0	50.00	6	80.00	6	120.0	4	160.0	1
N-Nitroso-di-n-propylamine			10.00	-6	20.00	-1	32.00	-1	50.00	7	80.00	5	120.0	0	160.0	-4
Hexachloroethane			10.00	10	20.00	6	32.00	5	50.00	5	80.00	0	120.0	-9	160.0	-16
Nitrobenzene			10.00	1	20.00	-2	32.00	1	50.00	1	80.00	1	120.0	0	160.0	-3
Isophorone			10.00	1	20.00	2	32.00	1	50.00	-1	80.00	0	120.0	0	160.0	-2
2-Nitrophenol					20.00	-7	32.00	-4	50.00	2	80.00	4	120.0	2	160.0	3
2,4-Dimethylphenol			10.00	0	20.00	1	32.00	3	50.00	4	80.00	-1	120.0	-3	160.0	-4
bis(2-Chloroethoxy)methane					10.00	-6	16.00	0	25.00	3	40.00	2	60.00	0	80.00	1
Benzoic acid			50.00	4	60.00	0	80.00	-3	100.0	-1	120.0	0	140.0	1	160.0	0
2,4-Dichlorophenol			10.00	0	20.00	-1	32.00	3	50.00	2	80.00	2	120.0	-2	160.0	-4
1,2,4-Trichlorobenzene			10.00	4	20.00	2	32.00	3	50.00	-1	80.00	-1	120.0	-2	160.0	-5
Naphthalene	2.000	1	5.000	-1	10.00	0	16.00	-1	25.00	2	40.00	2	60.00	0	80.00	-2
4-Chloroaniline			10.00	-33	20.00	-6	32.00	6	50.00	8	80.00	10	120.0	9	160.0	6
Hexachlorobutadiene			10.00	4	20.00	-1	32.00	3	50.00	-2	80.00	-1	120.0	-2	160.0	-1
4-Chloro-3-methylphenol			10.00	5	20.00	3	32.00	5	50.00	0	80.00	-2	120.0	-3	160.0	-8
2-Methylnaphthalene	2.000	-9	5.000	-3	10.00	2	16.00	5	25.00	4	40.00	2	60.00	0	80.00	-2
Hexachlorocyclopentadiene					20.00	-6	32.00	-7	50.00	4	80.00	7	120.0	1	160.0	1
2,4,6-Trichlorophenol			10.00	-6	20.00	0	32.00	0	50.00	3	80.00	5	120.0	0	160.0	-1
2,4,5-Trichlorophenol			10.00	0	20.00	6	32.00	2	50.00	-2	80.00	2	120.0	-3	160.0	-5
2-Chloronaphthalene					10.00	5	16.00	2	25.00	1	40.00	2	60.00	-4	80.00	-5
2-Nitroaniline					20.00	1	32.00	0	50.00	1	80.00	4	120.0	-2	160.0	-5
Dimethylphthalate			10.00	-3	20.00	3	32.00	5	50.00	5	80.00	4	120.0	-5	160.0	-9
2,6-Dinitrotoluene			10.00	-8	20.00	6	32.00	6	50.00	6	80.00	3	120.0	-8	160.0	-5
Acenaphthylene	2.000	1	5.000	2	10.00	7	16.00	4	25.00	3	40.00	1	60.00	-9	80.00	-10
3-Nitroaniline					20.00	-12	32.00	-7	50.00	8	80.00	7	120.0	5	160.0	-2
Acenaphthene	2.000	3	5.000	-2	10.00	2	16.00	2	25.00	2	40.00	2	60.00	-3	80.00	-5
2,4-Dinitrophenol					20.00	0	32.00	-8	50.00	-1	80.00	5	120.0	2	160.0	-2
4-Nitrophenol					20.00	-8	32.00	-1	50.00	7	80.00	8	120.0	0	160.0	-5
Dibenzofuran					10.00	0	16.00	1	25.00	2	40.00	4	60.00	-3	80.00	-4
2,4-Dinitrotoluene			10.00	-8	20.00	5	32.00	7	50.00	6	80.00	4	120.0	-4	160.0	-9
Diethylphthalate					10.00	3	16.00	5	25.00	6	40.00	2	60.00	-6	80.00	-10
Fluorene	2.000	-2	5.000	-3	10.00	2	16.00	2	25.00	4	40.00	5	60.00	-2	80.00	-5
4-Chlorophenyl-phenylether					10.00	2	16.00	1	25.00	2	40.00	1	60.00	-3	80.00	-3

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
4-Nitroaniline					20.00	-13	32.00	-2	50.00	5	80.00	9	120.0	2	160.0	-2
4,6-Dinitro-2-methylphenol					20.00	-3	32.00	-4	50.00	3	80.00	1	120.0	0	160.0	-1
N-Nitrosodiphenylamine					10.00	-1	16.00	-2	25.00	0	40.00	2	60.00	1	80.00	0
4-Bromophenyl-phenylether					10.00	-7	16.00	-4	25.00	2	40.00	3	60.00	3	80.00	4
Hexachlorobenzene			10.00	-1	20.00	-1	32.00	-1	50.00	1	80.00	2	120.0	0	160.0	-1
Pentachlorophenol					20.00	-20	32.00	-9	50.00	2	80.00	7	120.0	10	160.0	10
Phenanthrene	2.000	3	5.000	-1	10.00	3	16.00	1	25.00	0	40.00	-2	60.00	-1	80.00	-4
Anthracene	2.000	0	5.000	0	10.00	4	16.00	2	25.00	2	40.00	-1	60.00	-2	80.00	-5
Di-n-butylphthalate					10.00	10	16.00	8	25.00	4	40.00	-3	60.00	-7	80.00	-13
Fluoranthene	2.000	6	5.000	9	10.00	7	16.00	4	25.00	-1	40.00	-7	60.00	-8	80.00	-11
Pyrene	2.000	1	5.000	4	10.00	7	16.00	3	25.00	4	40.00	-4	60.00	-8	80.00	-8
Butylbenzylphthalate					10.00	-1	16.00	0	25.00	4	40.00	2	60.00	-2	80.00	-3
3,3'-Dichlorobenzidine					20.00	0	32.00	-5	50.00	1	80.00	2	120.0	0	160.0	-1
Benzo(a)anthracene	2.000	-3	5.000	-3	10.00	0	16.00	-1	25.00	3	40.00	2	60.00	2	80.00	0
bis(2-Ethylhexyl)phthalate					10.00	-1	16.00	-2	25.00	5	40.00	3	60.00	-1	80.00	-3
Chrysene	2.000	1	5.000	-1	10.00	-4	16.00	-3	25.00	2	40.00	3	60.00	1	80.00	1
Di-n-octylphthalate					10.00	-4	16.00	-1	25.00	-1	40.00	-1	60.00	2	80.00	4
Benzo(b)fluoranthene	2.000	-15	5.000	-7	10.00	-1	16.00	-3	25.00	0	40.00	7	60.00	6	80.00	13
Benzo(k)fluoranthene	2.000	-9	5.000	-2	10.00	3	16.00	8	25.00	3	40.00	-3	60.00	1	80.00	-1
Benzo(a)pyrene	2.000	-14	5.000	-9	10.00	2	16.00	0	25.00	3	40.00	5	60.00	5	80.00	8
Indeno(1,2,3-cd)pyrene	2.000	-11	5.000	-13	10.00	0	16.00	5	25.00	8	40.00	14	60.00	0	80.00	-3
Dibenz(a,h)anthracene	2.000	-12	5.000	-9	10.00	1	16.00	3	25.00	7	40.00	11	60.00	-2	80.00	0
Benzo(g,h,i)perylene	2.000	0	5.000	-4	10.00	-4	16.00	0	25.00	4	40.00	15	60.00	-5	80.00	-6
2-Fluorophenol			5.000	-19	10.00	-12	16.00	-3	25.00	6	40.00	9	60.00	11	80.00	7
Phenol-d5			5.000	-12	10.00	-3	16.00	2	25.00	5	40.00	5	60.00	5	80.00	-1
Nitrobenzene-d5			5.000	-2	10.00	-1	16.00	-2	25.00	1	40.00	2	60.00	2	80.00	1
2-Fluorobiphenyl			5.000	-1	10.00	5	16.00	5	25.00	4	40.00	-1	60.00	-5	80.00	-7
2,4,6-Tribromophenol			5.000	-16	10.00	-6	16.00	-1	25.00	6	40.00	11	60.00	3	80.00	4
Terphenyl-d14			5.000	-1	10.00	2	16.00	1	25.00	2	40.00	-1	60.00	-1	80.00	-2

SHD 04/03/09 : All manual integrations due to mischosen/tailing or splitting peaks.

Analyst: SHD

Date: 04/03/09

Reviewer: LW

Date: 04/03/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg=Average response factor; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA06
Calnum : 559133207001

Name : 6PTBNA6
Cal Date : 02-APR-2009

ICV 559133207016 (yd216 02-APR-2009) stds: S11779 (8X), S11548 (40X), S11130 (100X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Phenol	1.4389	1.3807	25.00	23.99	ug/mL	-4	20	
bis(2-Chloroethyl)ether	0.9832	0.9402	25.00	23.91	ug/mL	-4	30	
2-Chlorophenol	1.3158	1.3008	25.00	24.71	ug/mL	-1	30	
1,3-Dichlorobenzene	1.5441	1.4821	25.00	23.99	ug/mL	-4	30	
1,4-Dichlorobenzene	1.4531	1.4069	25.00	24.20	ug/mL	-3	20	
Benzyl alcohol	0.6978	0.6631	25.00	23.76	ug/mL	-5	30	
1,2-Dichlorobenzene	1.4047	1.3199	25.00	23.49	ug/mL	-6	30	
2-Methylphenol	0.8099	0.7557	25.00	23.33	ug/mL	-7	30	
bis(2-Chloroisopropyl) ether	1.4021	1.3397	25.00	23.89	ug/mL	-4	30	
4-Methylphenol	1.1551	0.9714	25.00	21.03	ug/mL	-16	30	
N-Nitroso-di-n-propylamine	0.6062	0.6137	25.00	25.31	ug/mL	1	30	
Hexachloroethane	0.5425	0.5372	25.00	24.75	ug/mL	-1	30	
Nitrobenzene	0.2621	0.2292	25.00	21.86	ug/mL	-13	30	
Isophorone	0.5266	0.4834	25.00	22.95	ug/mL	-8	30	
2-Nitrophenol	0.1926	0.1747	25.00	22.68	ug/mL	-9	20	m
2,4-Dimethylphenol	0.2912	0.2577	25.00	22.12	ug/mL	-12	30	
bis(2-Chloroethoxy)methane	0.3246	0.3013	25.00	23.21	ug/mL	-7	30	
Benzoic acid	0.1702	0.1379	50.00	56.50	ug/mL	13	40	m
2,4-Dichlorophenol	0.2940	0.2713	25.00	23.07	ug/mL	-8	20	
1,2,4-Trichlorobenzene	0.3233	0.3130	25.00	24.20	ug/mL	-3	30	
Naphthalene	0.9367	0.8417	25.00	22.46	ug/mL	-10	30	
4-Chloroaniline	0.4028	0.3947	25.00	24.50	ug/mL	-2	30	m
Hexachlorobutadiene	0.1759	0.1640	25.00	23.31	ug/mL	-7	20	
4-Chloro-3-methylphenol	0.2730	0.2511	25.00	22.99	ug/mL	-8	20	
2-Methylnaphthalene	0.6890	0.6214	25.00	22.55	ug/mL	-10	30	
Hexachlorocyclopentadiene	0.3665	0.2612	25.00	17.82	ug/mL	-29	40	
2,4,6-Trichlorophenol	0.3931	0.3509	25.00	22.31	ug/mL	-11	20	
2,4,5-Trichlorophenol	0.4245	0.3947	25.00	23.25	ug/mL	-7	30	m
2-Chloronaphthalene	1.1705	1.0767	25.00	23.00	ug/mL	-8	30	
2-Nitroaniline	0.3017	0.2730	25.00	22.62	ug/mL	-10	30	
Dimethylphthalate	1.4486	1.3697	25.00	23.64	ug/mL	-5	30	
2,6-Dinitrotoluene	0.3058	0.3089	25.00	25.25	ug/mL	1	30	
Acenaphthylene	1.8886	1.7171	25.00	22.73	ug/mL	-9	30	
3-Nitroaniline	0.3279	0.3024	25.00	23.06	ug/mL	-8	30	m
Acenaphthene	1.0736	0.9749	25.00	22.70	ug/mL	-9	20	
2,4-Dinitrophenol	0.1362	0.0995	25.00	26.71	ug/mL	7	40	m
4-Nitrophenol	0.1695	0.1586	25.00	23.38	ug/mL	-6	40	
Dibenzofuran	1.6693	1.5312	25.00	22.93	ug/mL	-8	30	m
2,4-Dinitrotoluene	0.4203	0.4032	25.00	23.99	ug/mL	-4	30	
Diethylphthalate	1.6017	1.4816	25.00	23.13	ug/mL	-7	30	
Fluorene	1.3562	1.2655	25.00	23.33	ug/mL	-7	30	
4-Chlorophenyl-phenylether	0.6406	0.5733	25.00	22.37	ug/mL	-11	40	
4-Nitroaniline	0.3075	0.2867	25.00	23.31	ug/mL	-7	30	m
4,6-Dinitro-2-methylphenol	0.1064	0.0887	25.00	24.94	ug/mL	0	30	m
N-Nitrosodiphenylamine	0.5153	0.5394	25.00	26.17	ug/mL	5	20	
4-Bromophenyl-phenylether	0.2171	0.1876	25.00	21.60	ug/mL	-14	30	
Hexachlorobenzene	0.2202	0.1897	25.00	21.53	ug/mL	-14	30	
Pentachlorophenol	0.1393	0.1110	25.00	19.92	ug/mL	-20	20	m

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Phenanthrene	1.0467	0.9079	25.00	21.69	ug/mL	-13	30	
Anthracene	1.0589	0.9141	25.00	21.58	ug/mL	-14	30	
Di-n-butylphthalate	1.3785	1.2391	25.00	22.47	ug/mL	-10	30	
Fluoranthene	1.1479	0.9626	25.00	20.96	ug/mL	-16	20	
Pyrene	1.3542	1.2994	25.00	23.99	ug/mL	-4	30	
Butylbenzylphthalate	0.6947	0.6357	25.00	22.88	ug/mL	-8	30	
3,3'-Dichlorobenzidine	0.3560	0.3221	25.00	26.30	ug/mL	5	40	
Benzo(a)anthracene	1.1293	1.0248	25.00	22.69	ug/mL	-9	30	
bis(2-Ethylhexyl)phthalate	0.8618	0.7830	25.00	22.72	ug/mL	-9	30	
Chrysene	0.9602	0.8456	25.00	22.02	ug/mL	-12	30	
Di-n-octylphthalate	1.8134	1.5787	25.00	21.76	ug/mL	-13	20	
Benzo(b)fluoranthene	1.1992	1.0904	25.00	22.73	ug/mL	-9	30	
Benzo(k)fluoranthene	1.1373	1.0006	25.00	21.99	ug/mL	-12	30	
Benzo(a)pyrene	0.9028	0.9809	25.00	27.16	ug/mL	9	20	m
Indeno(1,2,3-cd)pyrene	1.0344	0.9178	25.00	22.18	ug/mL	-11	30	m
Dibenz(a,h)anthracene	0.7878	0.6983	25.00	22.16	ug/mL	-11	30	
Benzo(g,h,i)perylene	0.7948	0.7125	25.00	22.41	ug/mL	-10	30	

m=manual integration

Page 2 of 2

559133207001 ICVs

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 MSBNA Water: EPA 8270C

Inst : MSBNA07
 Calnum : 569102964001
 Units : ug/mL

Name : 6PTBNA7
 Date : 12-MAR-2009 15:19
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	zcc06	569102964006	2/4/40 UG/ML	12-MAR-2009 15:19	S11584
L2	zcc07	569102964007	5/10/50 UG/ML	12-MAR-2009 15:54	S11585
L3	zcc08	569102964008	10/20/60 UG/ML	12-MAR-2009 16:29	S11586
L4	zcc09	569102964009	16/32/80 UG/ML	12-MAR-2009 17:05	S11587
L5	zcc10	569102964010	25/50/100 UG/ML	12-MAR-2009 17:41	S11588
L6	zcc11	569102964011	40/80/120 UG/ML	12-MAR-2009 18:17	S11589
L7	zcc12	569102964012	60/120/140 UG/ML	12-MAR-2009 18:53	S11590
L8	zcc13	569102964013	80/160/160 UG/ML	12-MAR-2009 19:29	S11591

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	Flg
Phenol		2.1534	2.1397	2.0606	2.0409	1.9470	1.8600	1.8743	AVRG		0.49730		2.0108	6	15	0.05	0.99	
bis(2-Chloroethyl)ether		1.6605	1.6693	1.5733	1.5641	1.4840	1.3631	1.3355	AVRG		0.65728		1.5214	9	15	0.05	0.99	
2-Chlorophenol		1.6416	1.6642	1.6015	1.5896	1.5517	1.4771	1.4553	AVRG		0.63747		1.5687	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.8125	1.7711	1.7220	1.6939	1.6291	1.5089	1.4275	AVRG		0.60527		1.6522	8	15	0.05	0.99	
1,4-Dichlorobenzene		1.8086	1.7791	1.7301	1.6954	1.6124	1.4870	1.3968	AVRG		0.60820		1.6442	9	15	0.05	0.99	
Benzyl alcohol		1.1284	1.1162	1.0436	1.0331	1.0450	1.0577	1.0688	AVRG		0.93422		1.0704	3	15	0.05	0.99	
1,2-Dichlorobenzene		1.7058	1.6832	1.6194	1.5814	1.5350	1.4208	1.3478	AVRG		0.64259		1.5562	9	15	0.05	0.99	
2-Methylphenol		1.2892	1.2776	1.1995	1.1842	1.1354	1.0986	1.0808m	AVRG		0.84693		1.1807	7	15	0.05	0.99	
bis(2-Chloroisopropyl) ether		2.4147	2.3676	2.2159	2.1371	1.9702	1.7449	1.6689	AVRG		0.48212		2.0742	14	15	0.05	0.99	
4-Methylphenol		1.8607	1.8704	1.7325	1.7080	1.7141	1.7420m	1.7626m	AVRG		0.56496		1.7700	4	15	0.05	0.99	
N-Nitroso-di-n-propylamine		0.9790	0.9582	0.9123	0.9458	0.9418	0.9104	0.8851	AVRG		1.07154		0.9332	3	15	0.050	0.99	
Hexachloroethane		0.6991	0.6999	0.6718	0.6594	0.6263	0.5708	0.5285	AVRG		1.57101		0.6365	10	15	0.05	0.99	
Nitrobenzene		0.4789m	0.4786m	0.4647m	0.4671m	0.4577	0.4398	0.4349	AVRG		2.17278		0.4602	4	15	0.05	0.99	
Isophorone		0.7743	0.7957	0.8002	0.8288	0.8423	0.8143	0.8071	AVRG		1.23616		0.8090	3	15	0.05	0.99	
2-Nitrophenol			0.2087	0.2089	0.2174	0.2263	0.2260	0.2287	AVRG		4.55926		0.2193	4	15	0.05	0.99	
2,4-Dimethylphenol		0.4149	0.4028	0.3792	0.3910	0.3992	0.3872	0.3786	AVRG		2.54285		0.3933	3	15	0.05	0.99	
bis(2-Chloroethoxy)methane			0.4508	0.4330	0.4479	0.4684	0.4721	0.4741	AVRG		2.18477		0.4577	4	15	0.05	0.99	
Benzoic acid		0.2108m	0.2445m	0.2656m	0.2879m	0.3066m	0.3107m	0.3242m	AVRG		3.58947		0.2786	15	15	0.05	0.99	
2,4-Dichlorophenol		0.3472	0.3483	0.3369	0.3458	0.3522	0.3484	0.3447	AVRG		2.88831		0.3462	1	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.3856	0.3855	0.3762	0.3774	0.3708	0.3457	0.3323	AVRG		2.72014		0.3676	6	15	0.05	0.99	
Naphthalene	1.1358	1.1074	1.0987	1.0573	1.0647	1.0273	1.0137	1.0176	AVRG		0.93871		1.0653	4	15	0.05	0.99	
4-Chloroaniline		0.4596	0.4930	0.4941	0.5018	0.5169	0.4987	0.4936	AVRG		2.02447		0.4940	3	15	0.05	0.99	
Hexachlorobutadiene		0.2162	0.2128	0.2127	0.2155	0.2104	0.1912	0.1855	AVRG		4.84663		0.2063	6	15	0.05	0.99	
4-Chloro-3-methylphenol		0.3545	0.3622	0.3625	0.3690	0.3695	0.3530	0.3418	AVRG		2.78600		0.3589	3	15	0.05	0.99	
2-Methylnaphthalene	0.7590	0.7381	0.7203	0.6997	0.7255	0.7659	0.7635	0.7607	AVRG		1.34846		0.7416	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	Flg	
Hexachlorocyclopentadiene			0.3715	0.3570	0.3649	0.3751	0.3761	0.3680	AVRG		2.71177		0.3688	2	15	0.050	0.99		
2,4,6-Trichlorophenol		0.4199	0.4364	0.4428	0.4534	0.4605	0.4546	0.4443	AVRG		2.24948		0.4445	3	15	0.05	0.99		
2,4,5-Trichlorophenol		0.4695	0.4946	0.4794	0.4915	0.4940	0.4755	0.4692m	AVRG		2.07491		0.4819	2	15	0.05	0.99		
2-Chloronaphthalene			1.1830	1.1513	1.1583	1.1662	1.1719	1.1622	AVRG		0.85801		1.1655	1	15	0.05	0.99		
2-Nitroaniline			0.4436	0.4391	0.4389	0.4411	0.4337	0.4285	AVRG		2.28580		0.4375	1	15	0.05	0.99		
Dimethylphthalate		1.5756	1.5271	1.4895	1.4776	1.4638	1.4171	1.3710	AVRG		0.67818		1.4745	5	15	0.05	0.99		
2,6-Dinitrotoluene			0.3601	0.3646	0.3588	0.3631	0.3687	0.3733	0.3787	AVRG		2.72654		0.3668	2	15	0.05	0.99	
Acenaphthylene	1.2929	1.2760	1.2449	1.2074	1.1704	1.1786	1.1910	1.1939	AVRG		0.82009		1.2194	4	15	0.05	0.99		
3-Nitroaniline			0.3612	0.3694	0.3819	0.3938	0.3993	0.4049	AVRG		2.59686		0.3851	4	15	0.05	0.99		
Acenaphthene	1.2314	1.2277	1.2405	1.2000	1.2335	1.2708	1.1821	1.1464	AVRG		0.82200		1.2165	3	15	0.05	0.99		
2,4-Dinitrophenol			0.1439	0.1667	0.1882	0.2136	0.2296	0.2464	LINR	12.0679	3.83123		0.1981	0.998	15	0.050	0.99		
4-Nitrophenol			0.2019	0.2014	0.1993	0.2033	0.2036m	0.2061m	AVRG		4.93607		0.2026	1	15	0.050	0.99		
Dibenzofuran			1.7258	1.6424	1.5982	1.6026	1.6020	1.6192	AVRG		0.61286		1.6317	3	15	0.05	0.99		
2,4-Dinitrotoluene		0.4872	0.4964	0.4870	0.4858	0.4926	0.4954	0.4949	AVRG		2.03528		0.4913	1	15	0.05	0.99		
Diethylphthalate			1.3529	1.2950	1.2708	1.2613	1.2642	1.2490	AVRG		0.77991		1.2822	3	15	0.05	0.99		
Fluorene	1.5126	1.4629	1.4282	1.3754	1.3730	1.4025	1.4048	1.4071	AVRG		0.70382		1.4208	3	15	0.05	0.99		
4-Chlorophenyl-phenylether			0.7055	0.6760	0.6791	0.6950	0.7036	0.7086	AVRG		1.43962		0.6946	2	15	0.05	0.99		
4-Nitroaniline			0.3847	0.3878	0.3983	0.4057	0.4125	0.4128	AVRG		2.49822		0.4003	3	15	0.05	0.99		
4,6-Dinitro-2-methylphenol			0.1464	0.1538	0.1631	0.1731	0.1837	0.1927	AVRG		5.92394		0.1688	11	15	0.05	0.99		
N-Nitrosodiphenylamine			0.5423	0.5077	0.5211	0.5164	0.5170	0.5307	AVRG		1.91375		0.5225	2	15	0.05	0.99		
4-Bromophenyl-phenylether			0.2259	0.2200	0.2261	0.2331	0.2415	0.2525	AVRG		4.28829		0.2332	5	15	0.05	0.99		
Hexachlorobenzene		0.2824	0.2906	0.2933	0.3114	0.3228	0.3133	0.3146	AVRG		3.28885		0.3041	5	15	0.05	0.99		
Pentachlorophenol			0.1649	0.1728	0.1910	0.2102	0.2164	0.2213	AVRG		5.09977		0.1961	12	15	0.05	0.99		
Phenanthrene	1.1991	1.1629	1.1484	1.1073	1.1315	1.1507	1.1319	1.1332	AVRG		0.87288		1.1456	2	15	0.05	0.99		
Anthracene	1.0944	1.0371	1.0204	0.9835	0.9983	1.0160	1.0194	1.0216	AVRG		0.97671		1.0238	3	15	0.05	0.99		
Di-n-butylphthalate			1.3711	1.3212	1.3114	1.3061	1.2545	1.2429	AVRG		0.76853		1.3012	4	15	0.05	0.99		
Fluoranthene	1.3700	1.3527	1.3622	1.3424	1.3743	1.3846	1.3679	1.3699	AVRG		0.73233		1.3655	1	15	0.05	0.99		
Pyrene	1.1371	1.1459	1.1633	1.1305	1.1870	1.1977	1.1488	1.1589	AVRG		0.86308		1.1586	2	15	0.05	0.99		
Butylbenzylphthalate			0.5287	0.5222	0.5309	0.5282	0.5093	0.5082	AVRG		1.91845		0.5213	2	15	0.05	0.99		
3,3'-Dichlorobenzidine			0.4525	0.4722	0.5107	0.5172	0.4734	0.4515	AVRG		2.08522		0.4796	6	15	0.05	0.99		
Benzo(a)anthracene	1.1442	1.0890	1.0832	1.0550	1.0697	1.0738	1.0752	1.1079	AVRG		0.91975		1.0872	3	15	0.05	0.99		
bis(2-Ethylhexyl)phthalate			0.7410	0.7206	0.7328	0.6854	0.5661	0.5283	AVRG		1.50974		0.6624	14	15	0.05	0.99		
Chrysene	1.0054	0.9962	0.9734	0.9586	0.9789	0.9965	0.9886	1.0194m	AVRG		1.01049		0.9896	2	15	0.05	0.99		
Di-n-octylphthalate			1.3104	1.3353	1.3961	1.4668	1.5133	1.6451	AVRG		0.69228		1.4445	9	15	0.05	0.99		
Benzo(b)fluoranthene	1.0622	1.0909	1.1289	1.1476	1.2107	1.2794	1.3304	1.4812	AVRG		0.82208		1.2164	12	15	0.05	0.99		
Benzo(k)fluoranthene	1.0628m	1.0498	1.0852	1.0964	1.1332	1.1870	1.2312m	1.2752m	AVRG		0.87712		1.1401	7	15	0.05	0.99		
Benzo(a)pyrene	0.8488	0.8891	0.9183	0.9302	0.9635	1.0062	1.0296	1.0929	AVRG		1.04183		0.9598	8	15	0.05	0.99		
Indeno(1,2,3-cd)pyrene	1.0022	1.0458	1.1230	1.1386	1.1776	1.1941	1.1658	1.1771	AVRG		0.88652		1.1280	6	15	0.05	0.99		
Dibenz(a,h)anthracene	0.7975m	0.7989	0.9069	0.9300m	0.9549	0.9806	0.9744	0.9979	AVRG		1.08978		0.9176	9	15	0.05	0.99		
Benzo(g,h,i)perylene	0.8405	0.8292	0.8968	0.9062	0.9207	0.9134	0.8572	0.8509	AVRG		1.14043		0.8769	4	15	0.05	0.99		
2-Fluorophenol	1.3147	1.3526	1.3923	1.3908	1.3916	1.3746	1.3520	1.3516	AVRG		0.73259		1.3650	2	15	0.05	0.99		

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2	Max	Min	Min	
														%RSD	%RSD	RF	r^2	Flg
Phenol-d5	1.8179	1.8549	1.8985	1.8461	1.8172	1.7617	1.7277	1.7463	AVRG		0.55285		1.8088	3	15	0.05	0.99	
Nitrobenzene-d5	0.3996	0.4011	0.4142	0.4172	0.4173	0.4169	0.4100	0.4197	AVRG		2.42713		0.4120	2	15	0.05	0.99	
2-Fluorobiphenyl	1.4766	1.3983	1.3600	1.3088	1.3148	1.3438	1.3354	1.3239	AVRG		0.73654		1.3577	4	15	0.05	0.99	
2,4,6-Tribromophenol		0.1666	0.1806	0.1857	0.1989	0.2171	0.2404		AVRG		5.04539		0.1982	14	15	0.05	0.99	
Terphenyl-d14	0.7489	0.7479	0.7541	0.7534	0.7998	0.8174	0.7994	0.8066	AVRG		1.28461		0.7784	4	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Phenol			10.00	7	20.00	6	32.00	2	50.00	1	80.00	-3	120.0	-8	160.0	-7
bis(2-Chloroethyl)ether			10.00	9	20.00	10	32.00	3	50.00	3	80.00	-2	120.0	-10	160.0	-12
2-Chlorophenol			10.00	5	20.00	6	32.00	2	50.00	1	80.00	-1	120.0	-6	160.0	-7
1,3-Dichlorobenzene			10.00	10	20.00	7	32.00	4	50.00	3	80.00	-1	120.0	-9	160.0	-14
1,4-Dichlorobenzene			10.00	10	20.00	8	32.00	5	50.00	3	80.00	-2	120.0	-10	160.0	-15
Benzyl alcohol			10.00	5	20.00	4	32.00	-3	50.00	-3	80.00	-2	120.0	-1	160.0	0
1,2-Dichlorobenzene			10.00	10	20.00	8	32.00	4	50.00	2	80.00	-1	120.0	-9	160.0	-13
2-Methylphenol			10.00	9	20.00	8	32.00	2	50.00	0	80.00	-4	120.0	-7	160.0	-8
bis(2-Chloroisopropyl) ether			10.00	16	20.00	14	32.00	7	50.00	3	80.00	-5	120.0	-16	160.0	-20
4-Methylphenol			10.00	5	20.00	6	32.00	-2	50.00	-4	80.00	-3	120.0	-2	160.0	0
N-Nitroso-di-n-propylamine			10.00	5	20.00	3	32.00	-2	50.00	1	80.00	1	120.0	-2	160.0	-5
Hexachloroethane			10.00	10	20.00	10	32.00	6	50.00	4	80.00	-2	120.0	-10	160.0	-17
Nitrobenzene			10.00	4	20.00	4	32.00	1	50.00	1	80.00	-1	120.0	-4	160.0	-6
Isophorone			10.00	-4	20.00	-2	32.00	-1	50.00	2	80.00	4	120.0	1	160.0	0
2-Nitrophenol					20.00	-5	32.00	-5	50.00	-1	80.00	3	120.0	3	160.0	4
2,4-Dimethylphenol			10.00	6	20.00	2	32.00	-4	50.00	-1	80.00	2	120.0	-2	160.0	-4
bis(2-Chloroethoxy)methane					10.00	-2	16.00	-5	25.00	-2	40.00	2	60.00	3	80.00	4
Benzoic acid			50.00	-24	60.00	-12	80.00	-5	100.0	3	120.0	10	140.0	12	160.0	16
2,4-Dichlorophenol			10.00	0	20.00	1	32.00	-3	50.00	0	80.00	2	120.0	1	160.0	0
1,2,4-Trichlorobenzene			10.00	5	20.00	5	32.00	2	50.00	3	80.00	1	120.0	-6	160.0	-10
Naphthalene	2.000	7	5.000	4	10.00	3	16.00	-1	25.00	0	40.00	-4	60.00	-5	80.00	-4
4-Chloroaniline			10.00	-7	20.00	0	32.00	0	50.00	2	80.00	5	120.0	1	160.0	0
Hexachlorobutadiene			10.00	5	20.00	3	32.00	3	50.00	4	80.00	2	120.0	-7	160.0	-10
4-Chloro-3-methylphenol			10.00	-1	20.00	1	32.00	1	50.00	3	80.00	3	120.0	-2	160.0	-5
2-Methylnaphthalene	2.000	2	5.000	0	10.00	-3	16.00	-6	25.00	-2	40.00	3	60.00	3	80.00	3
Hexachlorocyclopentadiene					20.00	1	32.00	-3	50.00	-1	80.00	2	120.0	2	160.0	0
2,4,6-Trichlorophenol			10.00	-6	20.00	-2	32.00	0	50.00	2	80.00	4	120.0	2	160.0	0
2,4,5-Trichlorophenol			10.00	-3	20.00	3	32.00	-1	50.00	2	80.00	2	120.0	-1	160.0	-3
2-Chloronaphthalene					10.00	2	16.00	-1	25.00	-1	40.00	0	60.00	1	80.00	0
2-Nitroaniline					20.00	1	32.00	0	50.00	0	80.00	1	120.0	-1	160.0	-2
Dimethylphthalate			10.00	7	20.00	4	32.00	1	50.00	0	80.00	-1	120.0	-4	160.0	-7
2,6-Dinitrotoluene			10.00	-2	20.00	-1	32.00	-2	50.00	-1	80.00	1	120.0	2	160.0	3
Acenaphthylene	2.000	6	5.000	5	10.00	2	16.00	-1	25.00	-4	40.00	-3	60.00	-2	80.00	-2
3-Nitroaniline					20.00	-6	32.00	-4	50.00	-1	80.00	2	120.0	4	160.0	5
Acenaphthene	2.000	1	5.000	1	10.00	2	16.00	-1	25.00	1	40.00	4	60.00	-3	80.00	-6
2,4-Dinitrophenol					20.00	15	32.00	2	50.00	-4	80.00	-3	120.0	-2	160.0	2
4-Nitrophenol					20.00	0	32.00	-1	50.00	-2	80.00	0	120.0	0	160.0	2
Dibenzofuran					10.00	6	16.00	1	25.00	-2	40.00	-2	60.00	-2	80.00	-1
2,4-Dinitrotoluene			10.00	-1	20.00	1	32.00	-1	50.00	-1	80.00	0	120.0	1	160.0	1
Diethylphthalate					10.00	6	16.00	1	25.00	-1	40.00	-2	60.00	-1	80.00	-3
Fluorene	2.000	6	5.000	3	10.00	1	16.00	-3	25.00	-3	40.00	-1	60.00	-1	80.00	-1
4-Chlorophenyl-phenylether					10.00	2	16.00	-3	25.00	-2	40.00	0	60.00	1	80.00	2

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
4-Nitroaniline					20.00	-4	32.00	-3	50.00	-1	80.00	1	120.0	3	160.0	3
4,6-Dinitro-2-methylphenol					20.00	-13	32.00	-9	50.00	-3	80.00	3	120.0	9	160.0	14
N-Nitrosodiphenylamine					10.00	4	16.00	-3	25.00	0	40.00	-1	60.00	-1	80.00	2
4-Bromophenyl-phenylether					10.00	-3	16.00	-6	25.00	-3	40.00	0	60.00	4	80.00	8
Hexachlorobenzene			10.00	-7	20.00	-4	32.00	-4	50.00	2	80.00	6	120.0	3	160.0	3
Pentachlorophenol					20.00	-16	32.00	-12	50.00	-3	80.00	7	120.0	10	160.0	13
Phenanthrrene	2.000	5	5.000	2	10.00	0	16.00	-3	25.00	-1	40.00	0	60.00	-1	80.00	-1
Anthracene	2.000	7	5.000	1	10.00	0	16.00	-4	25.00	-2	40.00	-1	60.00	0	80.00	0
Di-n-butylphthalate					10.00	5	16.00	2	25.00	1	40.00	0	60.00	-4	80.00	-4
Fluoranthene	2.000	0	5.000	-1	10.00	0	16.00	-2	25.00	1	40.00	1	60.00	0	80.00	0
Pyrene	2.000	-2	5.000	-1	10.00	0	16.00	-2	25.00	2	40.00	3	60.00	-1	80.00	0
Butylbenzylphthalate					10.00	1	16.00	0	25.00	2	40.00	1	60.00	-2	80.00	-2
3,3'-Dichlorobenzidine					20.00	-6	32.00	-2	50.00	6	80.00	8	120.0	-1	160.0	-6
Benzo(a)anthracene	2.000	5	5.000	0	10.00	0	16.00	-3	25.00	-2	40.00	-1	60.00	-1	80.00	2
bis(2-Ethylhexyl)phthalate					10.00	12	16.00	9	25.00	11	40.00	3	60.00	-15	80.00	-20
Chrysene	2.000	2	5.000	1	10.00	-2	16.00	-3	25.00	-1	40.00	1	60.00	0	80.00	3
Di-n-octylphthalate					10.00	-9	16.00	-8	25.00	-3	40.00	2	60.00	5	80.00	14
Benzo(b)fluoranthene	2.000	-13	5.000	-10	10.00	-7	16.00	-6	25.00	0	40.00	5	60.00	9	80.00	22
Benzo(k)fluoranthene	2.000	-7	5.000	-8	10.00	-5	16.00	-4	25.00	-1	40.00	4	60.00	8	80.00	12
Benzo(a)pyrene	2.000	-12	5.000	-7	10.00	-4	16.00	-3	25.00	0	40.00	5	60.00	7	80.00	14
Indeno(1,2,3-cd)pyrene	2.000	-11	5.000	-7	10.00	0	16.00	1	25.00	4	40.00	6	60.00	3	80.00	4
Dibenz(a,h)anthracene	2.000	-13	5.000	-13	10.00	-1	16.00	1	25.00	4	40.00	7	60.00	6	80.00	9
Benzo(g,h,i)perylene	2.000	-4	5.000	-5	10.00	2	16.00	3	25.00	5	40.00	4	60.00	-2	80.00	-3
2-Fluorophenol	2.000	-4	5.000	-1	10.00	2	16.00	2	25.00	2	40.00	1	60.00	-1	80.00	-1
Phenol-d5	2.000	1	5.000	3	10.00	5	16.00	2	25.00	0	40.00	-3	60.00	-4	80.00	-3
Nitrobenzene-d5	2.000	-3	5.000	-3	10.00	1	16.00	1	25.00	1	40.00	1	60.00	0	80.00	2
2-Fluorobiphenyl	2.000	9	5.000	3	10.00	0	16.00	-4	25.00	-3	40.00	-1	60.00	-2	80.00	-2
2,4,6-Tribromophenol			5.000	-16	10.00	-9	16.00	-6	25.00	0	40.00	10	60.00	21		
Terphenyl-d14	2.000	-4	5.000	-4	10.00	-3	16.00	-3	25.00	3	40.00	5	60.00	3	80.00	4

SHD 03/13/09 : Manual integrations correcting for automatically drawn baselines or mischosen peaks.

Analyst: SHD

Date: 03/13/09

Reviewer: LW

Date: 03/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg=Average response factor; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA07
Calnum : 569102964001

Name : 6PTBNA7
Cal Date : 12-MAR-2009

ICV 569102964014 (zcc14 12-MAR-2009) stds: S11358, S11130 (100X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Phenol	2.0108	1.7188	80.00	68.38	ug/mL	-15	20	
bis(2-Chloroethyl)ether	1.5214	1.3590	80.00	71.46	ug/mL	-11	30	
2-Chlorophenol	1.5687	1.3809	80.00	70.42	ug/mL	-12	30	
1,3-Dichlorobenzene	1.6522	1.4371	80.00	69.58	ug/mL	-13	30	
1,4-Dichlorobenzene	1.6442	1.4168	80.00	68.93	ug/mL	-14	20	
Benzyl alcohol	1.0704	0.9069	80.00	67.78	ug/mL	-15	30	
1,2-Dichlorobenzene	1.5562	1.3585	80.00	69.84	ug/mL	-13	30	
2-Methylphenol	1.1807	0.9964	80.00	67.51	ug/mL	-16	30	
bis(2-Chloroisopropyl) ether	2.0742	1.7572	80.00	67.77	ug/mL	-15	30	
4-Methylphenol	1.7700	1.5014	80.00	67.86	ug/mL	-15	30	
N-Nitroso-di-n-propylamine	0.9332	0.8651	80.00	74.16	ug/mL	-7	30	
Hexachloroethane	0.6365	0.5433	80.00	68.28	ug/mL	-15	30	
Nitrobenzene	0.4602	0.3941	80.00	68.50	ug/mL	-14	30	
Isophorone	0.8090	0.7861	80.00	77.74	ug/mL	-3	30	
2-Nitrophenol	0.2193	0.2020	80.00	73.68	ug/mL	-8	20	
2,4-Dimethylphenol	0.3933	0.3488	80.00	70.95	ug/mL	-11	30	
bis(2-Chloroethoxy)methane	0.4577	0.4630	30.00	30.35	ug/mL	1	30	
Benzoic acid	0.2786	0.3189	120.0	137.4	ug/mL	14	40	m
2,4-Dichlorophenol	0.3462	0.3096	80.00	71.53	ug/mL	-11	20	
1,2,4-Trichlorobenzene	0.3676	0.3307	80.00	71.96	ug/mL	-10	30	
Naphthalene	1.0653	1.0058	30.00	28.32	ug/mL	-6	30	
4-Chloroaniline	0.4940	0.4568	80.00	73.98	ug/mL	-8	30	
Hexachlorobutadiene	0.2063	0.1900	80.00	73.66	ug/mL	-8	20	
4-Chloro-3-methylphenol	0.3589	0.3153	80.00	70.28	ug/mL	-12	20	
2-Methylnaphthalene	0.7416	0.7130	30.00	28.84	ug/mL	-4	30	
Hexachlorocyclopentadiene	0.3688	0.3499	80.00	75.91	ug/mL	-5	40	
2,4,6-Trichlorophenol	0.4445	0.3998	80.00	71.95	ug/mL	-10	20	
2,4,5-Trichlorophenol	0.4819	0.4217	80.00	70.00	ug/mL	-13	30	
2-Chloronaphthalene	1.1655	1.1377	30.00	29.28	ug/mL	-2	30	
2-Nitroaniline	0.4375	0.3850	80.00	70.41	ug/mL	-12	30	
Dimethylphthalate	1.4745	1.2904	80.00	70.01	ug/mL	-12	30	
2,6-Dinitrotoluene	0.3668	0.3202	80.00	69.85	ug/mL	-13	30	
Acenaphthylene	1.2194	1.7599	30.00	43.30	ug/mL	44	30	v+ ***
3-Nitroaniline	0.3851	0.3465	80.00	71.98	ug/mL	-10	30	
Acenaphthene	1.2165	1.2608	30.00	31.09	ug/mL	4	20	
2,4-Dinitrophenol	0.1981	0.1818	80.00	67.80	ug/mL	-15	40	
4-Nitrophenol	0.2026	0.1773	80.00	70.03	ug/mL	-12	40	
Dibenzofuran	1.6317	1.5553	30.00	28.60	ug/mL	-5	30	
2,4-Dinitrotoluene	0.4913	0.4198	80.00	68.35	ug/mL	-15	30	
Diethylphthalate	1.2822	1.2597	30.00	29.47	ug/mL	-2	30	
Fluorene	1.4208	1.3703	30.00	28.93	ug/mL	-4	30	
4-Chlorophenyl-phenylether	0.6946	0.6655	30.00	28.74	ug/mL	-4	40	
4-Nitroaniline	0.4003	0.3512	80.00	70.20	ug/mL	-12	30	
4,6-Dinitro-2-methylphenol	0.1688	0.1451	80.00	68.78	ug/mL	-14	30	
N-Nitrosodiphenylamine	0.5225	0.5393	30.00	30.96	ug/mL	3	20	
4-Bromophenyl-phenylether	0.2332	0.2219	30.00	28.55	ug/mL	-5	30	
Hexachlorobenzene	0.3041	0.2726	80.00	71.74	ug/mL	-10	30	
Pentachlorophenol	0.1961	0.1823	80.00	74.39	ug/mL	-7	20	
Phenanthrene	1.1456	1.0781	30.00	28.23	ug/mL	-6	30	

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Anthracene	1.0238	1.1080	30.00	32.47	ug/mL	8	30	
Di-n-butylphthalate	1.3012	1.2756	30.00	29.41	ug/mL	-2	30	
Fluoranthene	1.3655	1.3596	30.00	29.87	ug/mL	0	20	
Pyrene	1.1586	1.1463	30.00	29.68	ug/mL	-1	30	
Butylbenzylphthalate	0.5213	0.5092	30.00	29.30	ug/mL	-2	30	
3,3'-Dichlorobenzidine	0.4796	0.4546	80.00	75.83	ug/mL	-5	40	
Benzo(a)anthracene	1.0872	1.0406	30.00	28.71	ug/mL	-4	30	
bis(2-Ethylhexyl)phthalate	0.6624	0.6610	30.00	29.94	ug/mL	0	30	
Chrysene	0.9896	0.9589	30.00	29.07	ug/mL	-3	30	
Di-n-octylphthalate	1.4445	1.4410	30.00	29.93	ug/mL	0	20	
Benzo(b)fluoranthene	1.2164	1.2573	30.00	31.01	ug/mL	3	30	
Benzo(k)fluoranthene	1.1401	1.2255	30.00	32.25	ug/mL	7	30	
Benzo(a)pyrene	0.9598	1.0741	30.00	33.57	ug/mL	12	20	
Indeno(1,2,3-cd)pyrene	1.1280	1.0809	30.00	28.75	ug/mL	-4	30	
Dibenz(a,h)anthracene	0.9176	0.9142	30.00	29.89	ug/mL	0	30	
Benzo(g,h,i)perylene	0.8769	0.8027	30.00	27.46	ug/mL	-8	30	

+=high bias m=manual integration v=ICV

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569102964001 ICVs

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA06 Run Name : CCV IDF : 1.0
Seqnum : 559154997006 File : ydh06 Time : 17-APR-2009 17:37
Cal : 559133207001 Caldate : 02-APR-2009
Standards: S11785

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Min RF	Flags
Phenol	1.4389	1.4511	50.00	50.42	ug/mL	1	20	0.0500		
bis(2-Chloroethyl)ether	0.9832	0.9678	50.00	49.22	ug/mL	-2	30	0.0500		
2-Chlorophenol	1.3158	1.3290	50.00	50.50	ug/mL	1	30	0.0500		
1,3-Dichlorobenzene	1.5441	1.5632	50.00	50.62	ug/mL	1	30	0.0500		
1,4-Dichlorobenzene	1.4531	1.4981	50.00	51.55	ug/mL	3	20	0.0500		
Benzyl alcohol	0.6978	0.7524	50.00	53.91	ug/mL	8	30	0.0500		
1,2-Dichlorobenzene	1.4047	1.4513	50.00	51.66	ug/mL	3	30	0.0500		
2-Methylphenol	0.8099	0.8220	50.00	50.75	ug/mL	1	30	0.0500		
bis(2-Chloroisopropyl) ether	1.4021	1.4493	50.00	51.68	ug/mL	3	30	0.0500		
4-Methylphenol	1.1551	1.2166	50.00	52.66	ug/mL	5	30	0.0500		
N-Nitroso-di-n-propylamine	0.6062	0.6906	50.00	56.96	ug/mL	14	30	0.0500		
Hexachloroethane	0.5425	0.5814	50.00	53.58	ug/mL	7	30	0.0500		
Nitrobenzene	0.2621	0.2659	50.00	50.73	ug/mL	1	30	0.0500		
Isophorone	0.5266	0.5923	50.00	56.24	ug/mL	12	30	0.0500		
2-Nitrophenol	0.1926	0.2040	50.00	52.96	ug/mL	6	20	0.0500		
2,4-Dimethylphenol	0.2912	0.2999	50.00	51.49	ug/mL	3	30	0.0500		
bis(2-Chloroethoxy)methane	0.3246	0.3508	25.00	27.02	ug/mL	8	30	0.0500		
Benzoic acid	0.1702	0.2607	100.0	130.3	ug/mL	30	40	0.0500		
2,4-Dichlorophenol	0.2940	0.3178	50.00	54.04	ug/mL	8	20	0.0500		
1,2,4-Trichlorobenzene	0.3233	0.3233	50.00	50.00	ug/mL	0	30	0.0500		
Naphthalene	0.9367	0.9599	25.00	25.62	ug/mL	2	30	0.0500		
4-Chloroaniline	0.4028	0.4800	50.00	59.58	ug/mL	19	30	0.0500		
Hexachlorobutadiene	0.1759	0.1766	50.00	50.21	ug/mL	0	20	0.0500		
4-Chloro-3-methylphenol	0.2730	0.3091	50.00	56.60	ug/mL	13	20	0.0500		
2-Methylnaphthalene	0.6890	0.7638	25.00	27.71	ug/mL	11	30	0.0500		
Hexachlorocyclopentadiene	0.3665	0.3987	50.00	54.39	ug/mL	9	40	0.0500		
2,4,6-Trichlorophenol	0.3931	0.4162	50.00	52.94	ug/mL	6	20	0.0500		
2,4,5-Trichlorophenol	0.4245	0.4438	50.00	52.28	ug/mL	5	30	0.0500		
2-Chloronaphthalene	1.1705	1.1975	25.00	25.57	ug/mL	2	30	0.0500		
2-Nitroaniline	0.3017	0.3212	50.00	53.23	ug/mL	6	30	0.0500		
Dimethylphthalate	1.4486	1.5534	50.00	53.62	ug/mL	7	30	0.0500		
2,6-Dinitrotoluene	0.3058	0.3322	50.00	54.32	ug/mL	9	30	0.0500		
Acenaphthylene	1.8886	1.9454	25.00	25.75	ug/mL	3	30	0.0500		
3-Nitroaniline	0.3279	0.3446	50.00	52.55	ug/mL	5	30	0.0500		
Acenaphthene	1.0736	1.1006	25.00	25.63	ug/mL	3	20	0.0500		
2,4-Dinitrophenol	0.1362	0.1982	50.00	64.45	ug/mL	29	40	0.0500	m	
4-Nitrophenol	0.1695	0.1904	50.00	56.16	ug/mL	12	40	0.0500		
Dibenzofuran	1.6693	1.7701	25.00	26.51	ug/mL	6	30	0.0500		
2,4-Dinitrotoluene	0.4203	0.4370	50.00	51.99	ug/mL	4	30	0.0500		
Diethylphthalate	1.6017	1.6842	25.00	26.29	ug/mL	5	30	0.0500		
Fluorene	1.3562	1.4426	25.00	26.59	ug/mL	6	30	0.0500		
4-Chlorophenyl-phenylether	0.6406	0.6549	25.00	25.56	ug/mL	2	40	0.0500		
4-Nitroaniline	0.3075	0.3461	50.00	56.29	ug/mL	13	30	0.0500		
4,6-Dinitro-2-methylphenol	0.1064	0.1296	50.00	58.25	ug/mL	16	30	0.0500		
N-Nitrosodiphenylamine	0.5153	0.5166	25.00	25.07	ug/mL	0	20	0.0500		
4-Bromophenyl-phenylether	0.2171	0.2178	25.00	25.08	ug/mL	0	30	0.0500		
Hexachlorobenzene	0.2202	0.2198	50.00	49.90	ug/mL	0	30	0.0500		
Pentachlorophenol	0.1393	0.1628	50.00	58.45	ug/mL	17	20	0.0500		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Min RF	Flags
Phenanthrene	1.0467	1.0541	25.00	25.18	ug/mL	1	30	0.0500		
Anthracene	1.0589	1.0808	25.00	25.52	ug/mL	2	30	0.0500		
Di-n-butylphthalate	1.3785	1.4277	25.00	25.89	ug/mL	4	30	0.0500		
Fluoranthene	1.1479	1.1792	25.00	25.68	ug/mL	3	20	0.0500		
Pyrene	1.3542	1.2234	25.00	22.59	ug/mL	-10	30	0.0500		
Butylbenzylphthalate	0.6947	0.6793	25.00	24.45	ug/mL	-2	30	0.0500		
3,3'-Dichlorobenzidine	0.3560	0.3981	50.00	54.26	ug/mL	9	40	0.0500		
Benzo(a)anthracene	1.1293	1.1219	25.00	24.84	ug/mL	-1	30	0.0500		
bis(2-Ethylhexyl)phthalate	0.8618	0.8600	25.00	24.95	ug/mL	0	30	0.0500		
Chrysene	0.9602	0.9532	25.00	24.82	ug/mL	-1	30	0.0500		
Di-n-octylphthalate	1.8134	1.8028	25.00	24.85	ug/mL	-1	20	0.0500		
Benzo(b)fluoranthene	1.1992	1.2635	25.00	26.34	ug/mL	5	30	0.0500		
Benzo(k)fluoranthene	1.1373	1.1072	25.00	24.34	ug/mL	-3	30	0.0500		
Benzo(a)pyrene	0.9028	0.9188	25.00	25.44	ug/mL	2	20	0.0500	m	
Indeno(1,2,3-cd)pyrene	1.0344	1.0021	25.00	24.22	ug/mL	-3	30	0.0500	m	
Dibenz(a,h)anthracene	0.7878	0.7586	25.00	24.08	ug/mL	-4	30	0.0500		
Benzo(g,h,i)perylene	0.7948	0.7539	25.00	23.71	ug/mL	-5	30	0.0500		
2-Fluorophenol	1.1403	1.2156	25.00	26.65	ug/mL	7	30	0.0500		
Phenol-d5	1.3776	1.3878	25.00	25.19	ug/mL	1	30	0.0500		
Nitrobenzene-d5	0.2795	0.2769	25.00	24.77	ug/mL	-1	30	0.0500		
2-Fluorobiphenyl	1.3301	1.3540	25.00	25.45	ug/mL	2	30	0.0500		
2,4,6-Tribromophenol	0.1885	0.1979	25.00	26.24	ug/mL	5	30	0.0500		
Terphenyl-d14	0.8579	0.7855	25.00	22.89	ug/mL	-8	30	0.0500		

LLH 04/20/09 : Corrected automatically drawn baseline .

LLH 04/20/09 : by SHD

Analyst: LLH

Date: 04/20/09

Reviewer: SHD

Date: 04/23/09

m=manual integration

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559154997006

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 MSBNA Water
EPA 8270C

Inst : MSBNA07 Run Name : CCV #4 IDF : 1.0
Seqnum : 569158981002 File : zdk02 Time : 20-APR-2009 10:07
Cal : 569102964001 Caldate : 12-MAR-2009
Standards: S11587

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Min RF	Flags
Phenol	2.0108	1.9834	32.00	31.56	ug/mL	-1	20	0.0500	m	
bis(2-Chloroethyl)ether	1.5214	1.6250	32.00	34.18	ug/mL	7	30	0.0500		
2-Chlorophenol	1.5687	1.6050	32.00	32.74	ug/mL	2	30	0.0500		
1,3-Dichlorobenzene	1.6522	1.7011	32.00	32.95	ug/mL	3	30	0.0500		
1,4-Dichlorobenzene	1.6442	1.7289	32.00	33.65	ug/mL	5	20	0.0500		
Benzyl alcohol	1.0704	1.0316	32.00	30.84	ug/mL	-4	30	0.0500		
1,2-Dichlorobenzene	1.5562	1.5952	32.00	32.80	ug/mL	3	30	0.0500		
2-Methylphenol	1.1807	1.2071	32.00	32.72	ug/mL	2	30	0.0500		
bis(2-Chloroisopropyl) ether	2.0742	2.1056	32.00	32.49	ug/mL	2	30	0.0500		
4-Methylphenol	1.7700	1.8050	32.00	32.63	ug/mL	2	30	0.0500		
N-Nitroso-di-n-propylamine	0.9332	0.9046	32.00	31.02	ug/mL	-3	30	0.0500		
Hexachloroethane	0.6365	0.6784	32.00	34.10	ug/mL	7	30	0.0500		
Nitrobenzene	0.4602	0.4393	32.00	30.55	ug/mL	-5	30	0.0500		
Isophorone	0.8090	0.7634	32.00	30.20	ug/mL	-6	30	0.0500		
2-Nitrophenol	0.2193	0.2258	32.00	32.94	ug/mL	3	20	0.0500		
2,4-Dimethylphenol	0.3933	0.3714	32.00	30.22	ug/mL	-6	30	0.0500		
bis(2-Chloroethoxy)methane	0.4577	0.4457	16.00	15.58	ug/mL	-3	30	0.0500		
Benzoic acid	0.2786	0.1889	80.00	54.24	ug/mL	-32	40	0.0500	c-	
2,4-Dichlorophenol	0.3462	0.3327	32.00	30.75	ug/mL	-4	20	0.0500		
1,2,4-Trichlorobenzene	0.3676	0.3694	32.00	32.16	ug/mL	0	30	0.0500		
Naphthalene	1.0653	1.0795	16.00	16.21	ug/mL	1	30	0.0500		
4-Chloroaniline	0.4940	0.4222	32.00	27.35	ug/mL	-15	30	0.0500		
Hexachlorobutadiene	0.2063	0.2088	32.00	32.38	ug/mL	1	20	0.0500		
4-Chloro-3-methylphenol	0.3589	0.3524	32.00	31.42	ug/mL	-2	20	0.0500		
2-Methylnaphthalene	0.7416	0.7310	16.00	15.77	ug/mL	-1	30	0.0500		
Hexachlorocyclopentadiene	0.3688	0.3072	32.00	26.66	ug/mL	-17	40	0.0500		
2,4,6-Trichlorophenol	0.4445	0.4517	32.00	32.51	ug/mL	2	20	0.0500		
2,4,5-Trichlorophenol	0.4819	0.4955	32.00	32.90	ug/mL	3	30	0.0500		
2-Chloronaphthalene	1.1655	1.2079	16.00	16.58	ug/mL	4	30	0.0500		
2-Nitroaniline	0.4375	0.4171	32.00	30.51	ug/mL	-5	30	0.0500		
Dimethylphthalate	1.4745	1.5183	32.00	32.95	ug/mL	3	30	0.0500		
2,6-Dinitrotoluene	0.3668	0.3851	32.00	33.60	ug/mL	5	30	0.0500		
Acenaphthylene	1.2194	1.2661	16.00	16.61	ug/mL	4	30	0.0500		
3-Nitroaniline	0.3851	0.2485	32.00	20.65	ug/mL	-35	30	0.0500	c- m ***	
Acenaphthene	1.2165	1.1146	16.00	14.66	ug/mL	-8	20	0.0500		
2,4-Dinitrophenol	0.1981	0.1618	32.00	31.90	ug/mL	0	40	0.0500		
4-Nitrophenol	0.2026	0.1524	32.00	24.07	ug/mL	-25	40	0.0500		
Dibenzofuran	1.6317	1.7226	16.00	16.89	ug/mL	6	30	0.0500		
2,4-Dinitrotoluene	0.4913	0.5044	32.00	32.85	ug/mL	3	30	0.0500		
Diethylphthalate	1.2822	1.3226	16.00	16.50	ug/mL	3	30	0.0500		
Fluorene	1.4208	1.4076	16.00	15.85	ug/mL	-1	30	0.0500		
4-Chlorophenyl-phenylether	0.6946	0.7172	16.00	16.52	ug/mL	3	40	0.0500		
4-Nitroaniline	0.4003	0.2646	32.00	21.15	ug/mL	-34	30	0.0500	c- ***	
4,6-Dinitro-2-methylphenol	0.1688	0.1702	32.00	32.26	ug/mL	1	30	0.0500		
N-Nitrosodiphenylamine	0.5225	0.5220	16.00	15.98	ug/mL	0	20	0.0500		
4-Bromophenyl-phenylether	0.2332	0.2381	16.00	16.33	ug/mL	2	30	0.0500		
Hexachlorobenzene	0.3041	0.3148	32.00	33.13	ug/mL	4	30	0.0500		
Pentachlorophenol	0.1961	0.1690	32.00	27.58	ug/mL	-14	20	0.0500		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Min RF	Flags
Phenanthrene	1.1456	1.1433	16.00	15.97	ug/mL	0	30	0.0500		
Anthracene	1.0238	1.0134	16.00	15.84	ug/mL	-1	30	0.0500		
Di-n-butylphthalate	1.3012	1.2766	16.00	15.70	ug/mL	-2	30	0.0500		
Fluoranthene	1.3655	1.2672	16.00	14.85	ug/mL	-7	20	0.0500		
Pyrene	1.1586	1.1836	16.00	16.34	ug/mL	2	30	0.0500		
Butylbenzylphthalate	0.5213	0.5249	16.00	16.11	ug/mL	1	30	0.0500		
3,3'-Dichlorobenzidine	0.4796	0.2515	32.00	16.78	ug/mL	-48	40	0.0500	c- ***	
Benzo(a)anthracene	1.0872	1.1081	16.00	16.31	ug/mL	2	30	0.0500		
bis(2-Ethylhexyl)phthalate	0.6624	0.7169	16.00	17.32	ug/mL	8	30	0.0500		
Chrysene	0.9896	1.0328	16.00	16.70	ug/mL	4	30	0.0500		
Di-n-octylphthalate	1.4445	1.2790	16.00	14.17	ug/mL	-11	20	0.0500		
Benzo(b)fluoranthene	1.2164	1.1151	16.00	14.67	ug/mL	-8	30	0.0500		
Benzo(k)fluoranthene	1.1401	1.0666	16.00	14.97	ug/mL	-6	30	0.0500		
Benzo(a)pyrene	0.9598	0.9118	16.00	15.20	ug/mL	-5	20	0.0500		
Indeno(1,2,3-cd)pyrene	1.1280	1.1827	16.00	16.78	ug/mL	5	30	0.0500		
Dibenz(a,h)anthracene	0.9176	0.9670	16.00	16.86	ug/mL	5	30	0.0500		
Benzo(g,h,i)perylene	0.8769	0.6685	16.00	12.20	ug/mL	-24	30	0.0500	!c-	
2-Fluorophenol	1.3650	1.2185	16.00	14.28	ug/mL	-11	30	0.0500		
Phenol-d5	1.8088	1.7294	16.00	15.30	ug/mL	-4	30	0.0500		
Nitrobenzene-d5	0.4120	0.3997	16.00	15.52	ug/mL	-3	30	0.0500		
2-Fluorobiphenyl	1.3577	1.3797	16.00	16.26	ug/mL	2	30	0.0500		
2,4,6-Tribromophenol	0.1982	0.2422	16.00	19.55	ug/mL	22	30	0.0500	!c+	
Terphenyl-d14	0.7784	0.7937	16.00	16.31	ug/mL	2	30	0.0500		

LLH 04/20/09 : Corrected automatically drawn baseline .

LLH 04/20/09 : by HDD

Analyst: LLH Date: 04/20/09 Reviewer: SHD Date: 04/23/09

!=warning +=high bias -=low bias c=CCV m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 559154997

Date : 04/17/09
 Sequence : MSBNA06 ydh

Reference : ydh06
 Analyzed : 04/17/09 17:37

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
	CCV+ICV+ICV/CCV STD	385783	4.59	1407490	6.01	885510	8.07	1750127	9.84	1587791	13.02	1351000	14.66	
	LOWER LIMIT	192892	4.09	703745	5.51	442755	7.57	875064	9.34	793896	12.52	675500	14.16	
	UPPER LIMIT	771566	5.09	2814980	6.51	1771020	8.57	3500254	10.34	3175582	13.52	2702000	15.16	
006	CCV	CCV	385783	4.59	1407490	6.01	885510	8.07	1750127	9.84	1587791	13.02	1351000	14.66
007	BLANK	QC492132	474267	4.59	1663930	6.00	946241	8.07	1785361	9.84	1888780	13.02	1661249	14.66
008	BS	QC492133	426498	4.59	1556415	6.01	971916	8.07	1927737	9.84	1794933	13.02	1456125	14.66
009	BSD	QC492134	499595	4.60	1823410	6.00	1169316	8.08	2370504	9.85	2330583	13.03	1902214	14.67
010	MSS	211468-007	493184	4.60	1849049	6.01	1182581	8.08	2219052	9.85	2110685	13.03	1756826	14.67
011	SDUP	QC492135	558142	4.60	1673176	6.01	1255406	8.08	2307728	9.85	2215416	13.03	1910679	14.67
012	SAMPLE	211416-001	567020	4.60	2136387	6.01	682876	8.08	2004465	9.85	1902824	13.03	1771352	14.67
013	SAMPLE	211416-002	499145	4.61	0 *	0.00 *	3567 *	8.38	0 *	0.00 *	0 *	0.00 *	0 *	0.00 *

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 569158981

Date : 04/20/09
 Sequence : MSBNA07 zdk

Reference : zdk02
 Analyzed : 04/20/09 10:07

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
	CCV+ICV+ICV/CCV STD	398468	4.82	1551079	6.25	901220	8.35	1598667	10.15	1718356	13.36	1686440	15.16	
	LOWER LIMIT	199234	4.32	775540	5.75	450610	7.85	799334	9.65	859178	12.86	843220	14.66	
	UPPER LIMIT	796936	5.32	3102158	6.75	1802440	8.85	3197334	10.65	3436712	13.86	3372880	15.66	
002	CCV	CCV #4	398468	4.82	1551079	6.25	901220	8.35	1598667	10.15	1718356	13.36	1686440	15.16
003	SAMPLE	211453-001	448426	4.81	1694147	6.25	962387	8.34	1693983	10.14	1904619	13.35	1946738	15.16
004	SAMPLE	211416-001	480001	4.81	1803363	6.25	1013496	8.34	1828051	10.14	2057836	13.35	2101518	15.16
005	SAMPLE	211416-002	477262	4.81	1787909	6.25	1005741	8.34	1799747	10.14	1995935	13.36	2047123	15.16
006	MSS	211468-007	448932	4.81	1698444	6.25	962913	8.34	1711964	10.14	1931531	13.36	1893516	15.16
007	SAMPLE	211416-002	486692	4.81	1831107	6.25	1021180	8.34	1835903	10.14	2034037	13.36	2091619	15.16
008	SAMPLE	211470-001	451473	4.81	1718621	6.25	975220	8.34	1690733	10.14	1875173	13.35	1926182	15.16
009	SAMPLE	211470-002	458368	4.81	1719877	6.25	990062	8.34	1712454	10.14	1881216	13.35	1960956	15.16
010	SAMPLE	211470-006	458834	4.81	1739543	6.25	983734	8.34	1697879	10.14	1959533	13.35	1972987	15.16
011	SAMPLE	211419-001	464748	4.81	1737385	6.25	988234	8.34	1720420	10.14	1904570	13.35	1984801	15.16
012	SAMPLE	211419-002	477272	4.81	1790824	6.25	1016311	8.34	1768313	10.14	1982281	13.35	2021256	15.16
013	SAMPLE	211449-001	473805	4.81	1771071	6.25	1004466	8.34	1737646	10.14	1936130	13.35	2008485	15.16
014	SAMPLE	211449-002	471451	4.81	1779028	6.25	996038	8.34	1744862	10.14	1938675	13.36	2004594	15.16
015	SAMPLE	211470-005	475374	4.81	1785989	6.25	951133	8.35	1810554	10.14	1978966	13.35	2032344	15.16
016	SAMPLE	211453-001	515578	4.81	1920143	6.25	1077732	8.34	1900375	10.14	2156803	13.36	2188957	15.16

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 559133207

Instrument : MSBNA06
 Method : EPA 8270C

Begun : 04/02/09 12:07
 SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	yd201	TUN	DFTPP/PEM 50UG/ML			04/02/09 12:07	1.0	1	
002	yd202	CCV	CCV			04/02/09 12:27	1.0	2	
003	yd203	BLANK	QC489837	Soil	149486	04/02/09 13:05	1.0	3	
004	yd204	LCS	QC489838	Soil	149486	04/02/09 13:41	1.0	3	
005	yd205	MSS	210997-001	Soil	149486	04/02/09 14:17	10.0	3	
006	yd206	SAMPLE	210997-002	Soil	149486	04/02/09 14:54	2.0	3	
007	yd207	TUN	DFTPP/PEM 50UG/ML			04/02/09 18:16	1.0	1	
008	yd208	ICAL	ICAL #1			04/02/09 18:38	1.0	4	
009	yd209	ICAL	ICAL #2			04/02/09 19:15	1.0	5	
010	yd210	ICAL	ICAL #3			04/02/09 19:52	1.0	6	
011	yd211	ICAL	ICAL #4			04/02/09 20:29	1.0	2	
012	yd212	ICAL	ICAL #5			04/02/09 21:06	1.0	7	
013	yd213	ICAL	ICAL #6			04/02/09 21:46	1.0	8	
014	yd214	ICAL	ICAL #7			04/02/09 22:29	1.0	9	
015	yd215	ICAL	ICAL #8			04/02/09 23:07	1.0	10	
016	yd216	ICV	ICV 25			04/02/09 23:48	1.0	11 12 3	
017	yd217	ICV	ICV 50			04/03/09 00:28	1.0	11 12 3	

SHD 04/03/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S11410 2=S11784 3=S11130 4=S11781 5=S11782 6=S11783 7=S11785 8=S11786 9=S11787 10=S11788 11=S11779
 12=S11548

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 559154997

Instrument : MSBNA06
 Method : EPA 8270C

Begun : 04/17/09 15:17
 SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ydh01	TUN	CCV #5			04/17/09 15:17	1.0	1	
002	ydh02	CCV	CCV #5			04/17/09 15:38	1.0	2	
003	ydh03	TUN	DFTTP/PEM 50UG/ML			04/17/09 16:41	1.0	1	
004	ydh04	TUN	CCV #5			04/17/09 16:54	1.0	1	
005	ydh05	TUN	DFTTP/PEM			04/17/09 17:11	1.0	1	
006	ydh06	CCV	CCV			04/17/09 17:37	1.0	2	
007	ydh07	BLANK	QC492132	Water	150046	04/17/09 18:26	1.0	3	
008	ydh08	BS	QC492133	Water	150046	04/17/09 19:03	1.0	3	
009	ydh09	BSD	QC492134	Water	150046	04/17/09 19:39	1.0	3	
010	ydh10	MSS	211468-007	Water	150046	04/17/09 20:16	1.0	3	3:BPPE4=100
011	ydh11	SDUP	QC492135	Water	150046	04/17/09 20:53	1.0	3	3:BPPE4=110
012	ydh12	SAMPLE	211416-001	Water	150046	04/17/09 21:31	1.0	3	
013	ydh13	SAMPLE	211416-002	Water	150046	04/17/09 22:09	1.0	3	2:DBF=150

HDD 04/20/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 13.

Standards used: 1=S11410 2=S11785 3=S11130

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 569102964

Instrument : MSBNA07 Begun : 03/12/09 12:04
 Method : EPA 8270C SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	zcc01	TUN	DFTPP/PEM 50 UG/ML			03/12/09 12:04	1.0	1
002	zcc02	TUN	DFTPP/PEM 50 UG/ML			03/12/09 12:39	1.0	1
003	zcc03	TUN	DFTPP/PEM 50 UG/ML			03/12/09 13:08	1.0	1
004	zcc04	CCV	CCV CHECK			03/12/09 13:26	1.0	2
005	zcc05	TUN	DFTPP/PEM 50 UG/ML			03/12/09 15:02	1.0	1
006	zcc06	ICAL	2/4/40 UG/ML			03/12/09 15:19	1.0	3
007	zcc07	ICAL	5/10/50 UG/ML			03/12/09 15:54	1.0	4
008	zcc08	ICAL	10/20/60 UG/ML			03/12/09 16:29	1.0	2
009	zcc09	ICAL	16/32/80 UG/ML			03/12/09 17:05	1.0	5
010	zcc10	ICAL	25/50/100 UG/ML			03/12/09 17:41	1.0	6
011	zcc11	ICAL	40/80/120 UG/ML			03/12/09 18:17	1.0	7
012	zcc12	ICAL	60/120/140 UG/ML			03/12/09 18:53	1.0	8
013	zcc13	ICAL	80/160/160 UG/ML			03/12/09 19:29	1.0	9
014	zcc14	ICV	30/80/120 UG/ML			03/12/09 20:07	1.0	10 11

SHD 03/13/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 14.

Analyst: SHD Date: 03/13/09 Reviewer: LW Date: 03/16/09
 Standards used: 1=S11410 2=S11586 3=S11584 4=S11585 5=S11587 6=S11588 7=S11589 8=S11590 9=S11591 10=S11358 11=S11130

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 569104310

Instrument : MSBNA07
 Method : EPA 8270C

Begun : 03/13/09 10:30
 SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	zcd01	TUN	DFTPP/PEM 50 UG/ML			03/13/09 10:30	1.0	1	
002	zcd02	CCV	CCV			03/13/09 10:48	1.0	2	
003	zcd03	BLANK	QC487103	Soil	148818	03/13/09 11:23	1.0	3	
004	zcd04	LCS	QC487104	Soil	148818	03/13/09 11:58	1.0	3	
005	zcd05	TUN	DFTPP/PEM 50 UG/ML			03/13/09 12:34	1.0	1	
006	zcd06	CCV	CCV			03/13/09 12:52	1.0	4	
007	zcd07	BLANK	QC487103	Soil	148818	03/13/09 13:27	1.0	3	
008	zcd08	LCS	QC487104	Soil	148818	03/13/09 14:02	1.0	3	
009	zcd09	SAMPLE	210517-005	Soil	148818	03/13/09 14:37	1.0	3	
010	zcd10	MSS	210461-004	Soil	148818	03/13/09 15:42	1.0	3	
011	zcd11	MS	QC487105	Soil	148818	03/13/09 16:19	1.0	3	
012	zcd12	MSD	QC487106	Soil	148818	03/13/09 16:44	1.0	3	
013	zcd13	MS	QC487105	Soil	148818	03/13/09 17:18	1.0	3	
014	zcd14	MSD	QC487106	Soil	148818	03/13/09 17:53	1.0	3	
015	zcd15	SAMPLE	210460-001	Soil	148818	03/13/09 18:28	1.0	3	
016	zcd16	SAMPLE	210460-002	Soil	148818	03/13/09 19:05	1.0	3	
017	zcd17	SAMPLE	210460-003	Soil	148818	03/13/09 19:41	1.0	3	
018	zcd18	SAMPLE	210460-004	Soil	148818	03/13/09 20:18	1.0	3	
019	zcd19	SAMPLE	210460-005	Soil	148818	03/13/09 20:54	2.0	3	
020	zcd20	SAMPLE	210460-006	Soil	148818	03/13/09 21:30	2.0	3	
021	zcd21	SAMPLE	210460-007	Soil	148818	03/13/09 22:05	1.0	3	
022	zcd22	SAMPLE	210460-008	Soil	148818	03/13/09 22:41	1.0	3	
023	zcd23	CCV	CCV			03/13/09 23:16	1.0	5	

SHD 03/13/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 8.

HDD 03/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 569158981

Instrument : MSBNA07
 Method : EPA 8270C

Begun : 04/20/09 09:41
 SOP Version : bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	zdk01	TUN	DFTPP/PEM 50UG/ML			04/20/09 09:41	1.0	1	
002	zdk02	CCV	CCV #4			04/20/09 10:07	1.0	2	
003	zdk03	SAMPLE	211453-001	Water	150046	04/20/09 11:13	1.0	3	
004	zdk04	SAMPLE	211416-001	Water	150046	04/20/09 11:48	1.0	3	
005	zdk05	SAMPLE	211416-002	Water	150046	04/20/09 12:24	1.0	3	
006	zdk06	MSS	211468-007	Water	150046	04/20/09 12:59	3.0	3	
007	zdk07	SAMPLE	211416-002	Water	150046	04/20/09 13:34	1.0	3	
008	zdk08	SAMPLE	211470-001	Water	150046	04/20/09 14:09	10.0	3	
009	zdk09	SAMPLE	211470-002	Water	150046	04/20/09 14:43	10.0	3	
010	zdk10	SAMPLE	211470-006	Water	150046	04/20/09 15:19	10.0	3	
011	zdk11	SAMPLE	211419-001	Water	150046	04/20/09 15:53	25.0	3	
012	zdk12	SAMPLE	211419-002	Water	150046	04/20/09 16:28	25.0	3	
013	zdk13	SAMPLE	211449-001	Water	150046	04/20/09 17:02	10.0	3	
014	zdk14	SAMPLE	211449-002	Water	150046	04/20/09 17:37	25.0	3	
015	zdk15	SAMPLE	211470-005	Water	150046	04/20/09 18:12	100.0	3	
016	zdk16	SAMPLE	211453-001	Water	150046	04/20/09 18:47	1.0	3	

LLH 04/20/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 010.

HDD 04/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 16.

SAMPLE PREPARATION SUMMARY

Batch # : 150046 Analysis : 625
 Started By : DJT Prep Date : 16-APR-2009 18:50 Finished By : KMH
 Method : 3520C SOP Version : 8270_3520_rv16 Units : mL
 Spike #1 ID : S11558 Spike #2 ID : S11699

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
211416-001		Water	1030	1	1	0.0009709	7	.4				8270-1	sediment
211416-002		Water	1060	1	1	0.0009434	7	.4				8270-1	sediment
211419-001		Water	1040	1	1	0.0009615	7	.4				625	
211419-002		Water	1040	1	1	0.0009615	7	.4				625	
211449-001		Water	1040	1	1	0.0009615	7	.4				625	
211449-002		Water	1030	1	1	0.0009709	7	.4				625	
211453-001		Water	1060	1	1	0.0009434	7	.4				(rebatched)	sediment
211468-007		Water	1000	1	1	0.001		.4				625	qc-pe 1.0mL=>1000mL v:v
211470-001		Water	1020	1	1	0.0009804	7	.4				625	
211470-002		Water	1000	1	1	0.001	7	.4				625	
211470-005		Water	1000	2	1	0.002	10	.4				625	wouldn't conc. further
211470-006		Water	1020	1	1	0.0009804	7	.4				625	
211470-007		Water	1030	1	1	0.0009709	7	.4				625	
211470-013		Water	1050	1	1	0.0009524	7	.4				625	
211470-014		Water	1000	1	1	0.001	7	.4				625	
211470-015		Water	950	1	1	0.001053	7	.4				625	
211470-016		Water	1000	1	1	0.001	7	.4				625	
QC492132	BLANK	Water	1000	1	1	0.001		.4				8270-1	
QC492133	BS	Water	1000	1	1	0.001		.4	1			8270-1	
QC492134	BSD	Water	1000	1	1	0.001		.4	1			8270-1	
QC492135	SDUP	Water	1000	1	1	0.001		.4				625	211468-007

LLH 04/20/09 : Matrix spikes were not performed for this analysis in batch 150046 due to insufficient sample amount.

Analyst: LLH Date: 04/20/09 Reviewer: SHD Date: 04/23/09

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BNA (8270 & 625) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Analysis: 82301/625
LIMS Batch No: 150046
Date Extracted: 9/16/09

Extraction Method:

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Cleanup Method,(if needed):

EPA 3640a GPC

Sample #	Container ID	Volume of Sample (mL)	pH	Final Volume (mL)	Cleanup (x if needed)	Comments
211416-001	M	1030	7	1.0		
↓ 002	↓	1060		1		↓
211419-001	G	1040		1		
↓ 002				1		
211449-001				1		
↓ 002	↓	1030				
211453-001	L	1060	↓			SEDIMENT
211468-007	A	1000	NA			
211470-001	G	1020	7			
002		1000	↓			
005		↓	10	2.0		
006		1020	7	1.0		wouldn't conc. further
007		1030				
013		1050				
014		1000				
015	↓	950				
016	H	1000	↓			
MB QC 492132	NA					
BS	3	↓				
BSD	4	↓				
SDUP	5	A	↓			211468-007A

0.4 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄.

pH of all samples adjusted to pH ≤ 2 with H₂SO₄

Cont. L/L extracted with 450mL of CH_2Cl_2

Extraction Start Time

Extraction End Time

pH of all samples adjusted to pH ≥ 11 with 10 N NaOH

Extraction Start Time

Extraction End Time

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to final volume at temperature (degrees C)

Belinguished to BNA department

Lot # / LIMS # / Time	Date / Initials
S11558B	4/16/09
S11699A	
FS075640	
EM49034	
1850	
1250	DOL 4/16/09
NA	4/16/09
↓	
EM4900904	
70	
✓	✓

Extraction Chemist

Continued from Page
Continued on Page

Reviewed by _____ **Date** _____

Laboratory Job Number 211416

ANALYTICAL REPORT

PCBs

Matrix: Water

Polychlorinated Biphenyls (PCBs)

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8082
Matrix:	Water	Sampled:	04/14/09
Units:	ug/L	Received:	04/14/09
Diln Fac:	1.000	Prepared:	04/21/09
Batch#:	150170	Analyzed:	04/22/09

Field ID: E027 Lab ID: 211416-001
 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	66	65-135
Decachlorobiphenyl	31 *	65-135

Field ID: E026 Lab ID: 211416-002
 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	72	65-135
Decachlorobiphenyl	31 *	65-135

Type: BLANK Cleanup Method: EPA 3665A
 Lab ID: QC492644

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	34 *	65-135

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Polychlorinated Biphenyls (PCBs)

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 3520C
Project#:	Y0239-04.A3	Analysis:	EPA 8082
Matrix:	Water	Batch#:	150170
Units:	ug/L	Prepared:	04/21/09
Diln Fac:	1.000	Analyzed:	04/22/09

Type: BS Cleanup Method: EPA 3665A
 Lab ID: QC492645

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	4.749	95	73-139
Aroclor-1260	5.000	4.537	91	68-139

Surrogate	%REC	Limits
TCMX	70	65-135
Decachlorobiphenyl	32 *	65-135

Type: BSD Cleanup Method: EPA 3665A
 Lab ID: QC492646

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	4.951	99	73-139	4	23
Aroclor-1260	5.000	5.179	104	68-139	13	27

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	39 *	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 PCBS Water: EPA 8082

Inst : GC22
 Calnum : 259138658001
 Units : pg/uL

Name : 1660_096
 Date : 06-APR-2009 19:09
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	096_009	259138658009	PCB10_2	06-APR-2009 19:09	S11430
L2	096_010	259138658010	PCB25_5	06-APR-2009 19:36	S11437
L3	096_011	259138658011	PCB100_20	06-APR-2009 20:02	S11438
L4	096_012	259138658012	PCB250_50	06-APR-2009 20:28	S11439
L5	096_013	259138658013	PCB500_100	06-APR-2009 20:55	S11440
L6	096_014	259138658014	PCB750_150	06-APR-2009 21:21	S11441
L7	096_015	259138658015	PCB1000_200	06-APR-2009 21:47	S11442

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	19.800	19.000	17.410	16.904	15.092	14.245	14.879	AVRG		0.05966		16.761	13	.99	20		
Aroclor-1016 Peak # 2	A	59.800	58.640	58.410	56.328	55.888	53.953	57.856	AVRG		0.01746		57.268	3	.99	20		
Aroclor-1016 Peak # 3	A	35.800	32.640	31.680	32.004	30.624	28.695	30.220	AVRG		0.03158		31.666	7	.99	20		
Aroclor-1016 Peak # 4	A	18.600	16.920	16.060	15.056	14.810	13.535	14.438	AVRG		0.06397		15.631	11	.99	20		
Aroclor-1016 Peak # 5	A	36.500	30.040	26.140	25.644	24.608	23.167	25.023	AVRG		0.03663		27.303	17	.99	20		
Aroclor-1260 Peak # 1	A	127.60	119.92	114.66	110.20	116.19	110.77	129.34	AVRG		0.00845		118.38	6	.99	20		
Aroclor-1260 Peak # 2	A	126.10	111.32	104.14	102.25	105.91	101.88	118.23	AVRG		0.00909		109.97	8	.99	20		
Aroclor-1260 Peak # 3	A	102.60	95.520	90.800	87.232	90.210	86.703	99.858	AVRG		0.01072		93.275	7	.99	20		
Aroclor-1260 Peak # 4	A	244.80	235.48	222.18	224.36	251.61	245.37	262.66	AVRG		0.00415		240.92	6	.99	20		
Aroclor-1260 Peak # 5	A	108.40	103.36	98.530	95.916	96.782	99.216	110.76	AVRG		0.00982		101.85	6	.99	20		
TCMX	A	1444.0	1399.2	1342.1	1389.2	1570.3	1549.2	1570.1	AVRG		6.82E-4		1466.3	7	.99	20		
Decachlorobiphenyl	A	1694.0	1545.2	1860.2	1579.3	1697.8	1737.4	1744.3	AVRG		5.90E-4		1694.0	6	.99	20		
Aroclor-1016 Peak # 1	B	73.500	70.000	68.580	66.020	71.748	70.281	77.821	AVRG		0.01406		71.136	5	.99	20		
Aroclor-1016 Peak # 2	B	206.80	192.92	200.86	204.05	233.42	260.47	312.99	AVRG		0.00434		230.22	19	.99	20		
Aroclor-1016 Peak # 3	B	91.700	84.360	87.020	83.184	91.866	97.533	116.26	AVRG		0.01074		93.132	12	.99	20		
Aroclor-1016 Peak # 4	B	52.700	41.480	42.650	41.040	44.196	45.523	50.889	AVRG		0.02198		45.497	10	.99	20		
Aroclor-1016 Peak # 5	B	63.800	50.200	54.660	51.276	56.576	60.573	66.861	AVRG		0.01733		57.707	11	.99	20		
Aroclor-1260 Peak # 1	B	207.60	204.40	211.42	217.65	243.65	271.09	300.11	AVRG		0.00423		236.56	16	.99	20		
Aroclor-1260 Peak # 2	B	205.30	189.48	185.43	190.73	217.00	227.80	256.77	AVRG		0.00475		210.36	12	.99	20		
Aroclor-1260 Peak # 3	B	165.30	162.48	152.07	155.69	177.46	183.22	213.66	AVRG		0.00579		172.84	12	.99	20		
Aroclor-1260 Peak # 4	B	436.40	397.96	416.04	465.66	529.25	505.24	528.15	AVRG		0.00213		468.39	11	.99	20		
Aroclor-1260 Peak # 5	B	192.00	182.12	184.11	189.45	212.46	214.34	246.99	AVRG		0.00492		203.07	11	.99	20		
TCMX	B	3413.5	3217.4	3539.7	4174.9	4405.1	4121.1	4037.2	AVRG		2.60E-4		3844.1	12	.99	20		
Decachlorobiphenyl	B	3645.5	3384.0	4473.4	4104.0	4464.0	3895.8	3745.6	AVRG		2.53E-4		3958.9	10	.99	20		

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Aroclor-1016 Peak # 1	A	10.00	18	25.00	13	100.0	4	250.0	1	500.0	-10	750.0	-15	1000	-11
Aroclor-1016 Peak # 2	A	10.00	4	25.00	2	100.0	2	250.0	-2	500.0	-2	750.0	-6	1000	1
Aroclor-1016 Peak # 3	A	10.00	13	25.00	3	100.0	0	250.0	1	500.0	-3	750.0	-9	1000	-5
Aroclor-1016 Peak # 4	A	10.00	19	25.00	8	100.0	3	250.0	-4	500.0	-5	750.0	-13	1000	-8
Aroclor-1016 Peak # 5	A	10.00	34	25.00	10	100.0	-4	250.0	-6	500.0	-10	750.0	-15	1000	-8
Aroclor-1260 Peak # 1	A	10.00	8	25.00	1	100.0	-3	250.0	-7	500.0	-2	750.0	-6	1000	9
Aroclor-1260 Peak # 2	A	10.00	15	25.00	1	100.0	-5	250.0	-7	500.0	-4	750.0	-7	1000	8
Aroclor-1260 Peak # 3	A	10.00	10	25.00	2	100.0	-3	250.0	-6	500.0	-3	750.0	-7	1000	7
Aroclor-1260 Peak # 4	A	10.00	2	25.00	-2	100.0	-8	250.0	-7	500.0	4	750.0	2	1000	9
Aroclor-1260 Peak # 5	A	10.00	6	25.00	1	100.0	-3	250.0	-6	500.0	-5	750.0	-3	1000	9
TCMX	A	2.000	-2	5.000	-5	20.00	-8	50.00	-5	100.0	7	150.0	6	200.0	7
Decachlorobiphenyl	A	2.000	0	5.000	-9	20.00	10	50.00	-7	100.0	0	150.0	3	200.0	3
Aroclor-1016 Peak # 1	B	10.00	3	25.00	-2	100.0	-4	250.0	-7	500.0	1	750.0	-1	1000	9
Aroclor-1016 Peak # 2	B	10.00	-10	25.00	-16	100.0	-13	250.0	-11	500.0	1	750.0	13	1000	36
Aroclor-1016 Peak # 3	B	10.00	-2	25.00	-9	100.0	-7	250.0	-11	500.0	-1	750.0	5	1000	25
Aroclor-1016 Peak # 4	B	10.00	16	25.00	-9	100.0	-6	250.0	-10	500.0	-3	750.0	0	1000	12
Aroclor-1016 Peak # 5	B	10.00	11	25.00	-13	100.0	-5	250.0	-11	500.0	-2	750.0	5	1000	16
Aroclor-1260 Peak # 1	B	10.00	-12	25.00	-14	100.0	-11	250.0	-8	500.0	3	750.0	15	1000	27
Aroclor-1260 Peak # 2	B	10.00	-2	25.00	-10	100.0	-12	250.0	-9	500.0	3	750.0	8	1000	22
Aroclor-1260 Peak # 3	B	10.00	-4	25.00	-6	100.0	-12	250.0	-10	500.0	3	750.0	6	1000	24
Aroclor-1260 Peak # 4	B	10.00	-7	25.00	-15	100.0	-11	250.0	-1	500.0	13	750.0	8	1000	13
Aroclor-1260 Peak # 5	B	10.00	-5	25.00	-10	100.0	-9	250.0	-7	500.0	5	750.0	6	1000	22
TCMX	B	2.000	-11	5.000	-16	20.00	-8	50.00	9	100.0	15	150.0	7	200.0	5
Decachlorobiphenyl	B	2.000	-8	5.000	-15	20.00	13	50.00	4	100.0	13	150.0	-2	200.0	-5

KMH 04/07/09 : corrected automatically drawn baselines

Analyst: KMH

Date: 04/07/09

Reviewer: EAH

Date: 04/08/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg=Average response factor

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259138658001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 PCBS Water
EPA 8082

Inst : GC22 Name : 1660_096
Calnum : 259138658001 Cal Date : 06-APR-2009

ICV 259138658017 (096_017 06-APR-2009) stds: S11723

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	250.0	255.8	pg/uL	2	15	
Aroclor-1260	A	250.0	244.3	pg/uL	-2	15	
Aroclor-1016	B	250.0	237.8	pg/uL	-5	15	
Aroclor-1260	B	250.0	239.9	pg/uL	-4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 PCBS Water
EPA 8082

Inst : GC22 Run Name : PCB500_100 IDF : 1.0
Seqnum : 259161669002 File : 112_002 Time : 22-APR-2009 06:55
Cal : 259138658001 Caldate : 06-APR-2009
Standards: S11440

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	514.5	pg/uL	3	15	
Aroclor-1260	A			500.0	552.5	pg/uL	10	15	
TCMX	A	1466.3	1559.1	100.0	106.3	pg/uL	6	15	
Decachlorobiphenyl	A	1694.0	1479.5	100.0	87.34	pg/uL	-13	15	
Aroclor-1016	B			500.0	548.3	pg/uL	10	15	
Aroclor-1260	B			500.0	658.9	pg/uL	32	15	c+ ***
TCMX	B	3844.1	4928.1	100.0	128.2	pg/uL	28	15	c+
Decachlorobiphenyl	B	3958.9	3729.7	100.0	94.21	pg/uL	-6	15	

KMH 04/22/09 : Corrected automatically drawn baseline .

Analyst: KMH Date: 04/22/09 Reviewer: CW Date: 04/23/09

+high bias c=CCV

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259161669002

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 PCBS Water
EPA 8082

Inst : GC22 Run Name : PCB250_50 IDF : 1.0
 Seqnum : 259161669011 File : 112_011 Time : 22-APR-2009 15:47
 Cal : 259138658001 Caldate : 06-APR-2009
 Standards: S11439

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			250.0	255.1	pg/uL	2	15	
Aroclor-1260	A			250.0	269.3	pg/uL	8	15	
TCMX	A	1466.3	1536.9	50.00	52.41	pg/uL	5	15	
Decachlorobiphenyl	A	1694.0	1450.6	50.00	42.82	pg/uL	-14	15	
Aroclor-1016	B			250.0	270.4	pg/uL	8	15	
Aroclor-1260	B			250.0	284.1	pg/uL	14	15	
TCMX	B	3844.1	4861.4	50.00	63.23	pg/uL	26	15	c+
Decachlorobiphenyl	B	3958.9	3795.2	50.00	47.93	pg/uL	-4	15	

KMH 04/22/09 : Corrected automatically drawn baseline .

Analyst: KMH Date: 04/22/09 Reviewer: CW Date: 04/23/09

+high bias c=CCV

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259161669011

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 PCBS Water
EPA 8082

Inst : GC22 Run Name : PCB500_100 IDF : 1.0
 Seqnum : 259161669018 File : 112_018 Time : 22-APR-2009 19:19
 Cal : 259138658001 Caldate : 06-APR-2009
 Standards: S11440

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Flags
Aroclor-1016	A			500.0	478.4	pg/uL	-4	15		
Aroclor-1260	A			500.0	563.4	pg/uL	13	15		
TCMX	A	1466.3	1600.2	100.0	109.1	pg/uL	9	15		
Decachlorobiphenyl	A	1694.0	1669.6	100.0	98.56	pg/uL	-1	15		
Aroclor-1016	B			500.0	501.9	pg/uL	0	15		
Aroclor-1260	B			500.0	617.1	pg/uL	23	15	c+ ***	
TCMX	B	3844.1	4568.4	100.0	118.8	pg/uL	19	15	c+	
Decachlorobiphenyl	B	3958.9	3753.3	100.0	94.81	pg/uL	-5	15		

KMH 04/23/09 : Corrected automatically drawn baseline .

Analyst: KMH Date: 04/23/09 Reviewer: CW Date: 04/23/09

+high bias c=CCV

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259161669018

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 259138658

Instrument : GC22
 Method : EPA 8082

Begun : 04/06/09 06:58
 SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	096_001	X	HEX			04/06/09 06:58	1.0	
002	096_002	CCV	PCB250_50			04/06/09 07:25	1.0	1
003	096_003	X	CCV			04/06/09 07:51	1.0	1
004	096_004	CCV	PCB500_100			04/06/09 11:22	1.0	2
005	096_005	CCV	PCB500_100			04/06/09 11:48	1.0	2
006	096_006	X	HEX			04/06/09 17:51	1.0	
007	096_007	X	HEX			04/06/09 18:17	1.0	
008	096_008	IB	CAL			04/06/09 18:43	1.0	
009	096_009	ICAL	PCB10_2			04/06/09 19:09	1.0	3
010	096_010	ICAL	PCB25_5			04/06/09 19:36	1.0	4
011	096_011	ICAL	PCB100_20			04/06/09 20:02	1.0	5
012	096_012	ICAL	PCB250_50			04/06/09 20:28	1.0	1
013	096_013	ICAL	PCB500_100			04/06/09 20:55	1.0	2
014	096_014	ICAL	PCB750_150			04/06/09 21:21	1.0	6
015	096_015	ICAL	PCB1000_200			04/06/09 21:47	1.0	7
016	096_016	X	HEX			04/06/09 22:13	1.0	
017	096_017	ICV	ULTRA_1660			04/06/09 22:39	1.0	8
018	096_018	X	ICV			04/06/09 23:05	1.0	8
019	096_019	X	HEX			04/06/09 23:32	1.0	
020	096_020	ICAL	AR1232			04/06/09 23:58	1.0	9
021	096_021	ICAL	AR1242			04/07/09 00:24	1.0	10
022	096_022	ICAL	AR1248			04/07/09 00:51	1.0	11
023	096_023	ICAL	AR2154			04/07/09 01:17	1.0	12
024	096_024	ICAL	AR1262			04/07/09 01:43	1.0	13
025	096_025	ICAL	AR1268			04/07/09 02:10	1.0	14
026	096_026	X	HEX			04/07/09 02:36	1.0	

KMH 04/07/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 26.

Analyst: KMH Date: 04/07/09 Reviewer: EAH Date: 04/08/09

Standards used: 1=S11439 2=S11440 3=S11430 4=S11437 5=S11438 6=S11441 7=S11442 8=S11723 9=S9582 10=S11044 11=S11219

12=S10571 13=S11267 14=S9862

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 259161669

Instrument : GC22
 Method : EPA 8082

Begun : 04/22/09 06:29
 SOP Version : pcb_rv.7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	112_001	X	HEX			04/22/09 06:29	1.0	
002	112_002	CCV	PCB500_100			04/22/09 06:55	1.0	1
003	112_003	X	CCV			04/22/09 07:21	1.0	1
004	112_004	CCV	AR2154			04/22/09 12:00	1.0	2
005	112_005	BLANK	QC492644	Water	150170	04/22/09 13:00	1.0	
006	112_006	BS	QC492645	Water	150170	04/22/09 13:26	1.0	
007	112_007	BSD	QC492646	Water	150170	04/22/09 13:52	1.0	
008	112_008	SAMPLE	211416-001	Water	150170	04/22/09 14:19	1.0	
009	112_009	SAMPLE	211416-002	Water	150170	04/22/09 14:45	1.0	
010	112_010	SAMPLE	211482-001	Water	150170	04/22/09 15:11	1.0	
011	112_011	CCV	PCB250_50			04/22/09 15:47	1.0	3
012	112_012	BS	QC492645	Water	150170	04/22/09 16:25	1.0	
013	112_013	BSD	QC492646	Water	150170	04/22/09 16:51	1.0	
014	112_014	SAMPLE	211559-003	Water	150170	04/22/09 17:34	1.0	
015	112_015	SAMPLE	211559-004	Water	150170	04/22/09 18:00	1.0	
016	112_016	SAMPLE	211559-006	Water	150170	04/22/09 18:26	1.0	
017	112_017	SAMPLE	211559-008	Water	150170	04/22/09 18:52	1.0	
018	112_018	CCV	PCB500_100			04/22/09 19:19	1.0	1
019	112_019	X	CCV			04/22/09 19:45	1.0	1
020	112_020	X	HEX			04/22/09 20:11	1.0	

KMH 04/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

SAMPLE PREPARATION SUMMARY

Batch # : 150170 Analysis : PCB
Started By : DJT Prep Date : 21-APR-2009 14:20 Finished By : JJB
Method : 3520C SOP Version : PCB_3520_rv9 Units : mL
Spike #1 ID : S11847 Spike #2 ID : S11288

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
211416-001		Water	1030	25	1	0.02427	7	.05			3665A	PCB	re-x(sediment)
211416-002		Water	1060	25	1	0.02358	7	.05			3665A	PCB	re-x(sediment)
211482-001		Water	1060	25	1	0.02358	7	.05			3665A	PCB	re-x(sediment)
211559-003		Water	1040	25	1	0.02404	7	.05			3665A	PCB	
211559-004		Water	1060	25	1	0.02358	7	.05			3665A	PCB	
211559-006		Water	1020	25	1	0.02451	7	.05			3665A	PCB	
211559-008		Water	1010	25	1	0.02475	7	.05			3665A	PCB	
QC492644	BLANK	Water	1000	25	1	0.025		.05			3665A	PCB	
QC492645	BS	Water	1000	25	1	0.025		.05	.05		3665A	PCB	
QC492646	BSD	Water	1000	25	1	0.025		.05	.05		3665A	PCB	

KMH 04/22/09 : Matrix spikes were not performed for this analysis in batch 150170 due to insufficient sample amount.

KMH 04/22/09 : all samples copper cleaned (3660B)

Analyst: KMH Date: 04/22/09 Reviewer: CW Date: 04/23/09

REPORTING SUMMARY FOR 211416 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
211416-001	Aroclor-1016	GC22	A	04/22/09 14:19
211416-001	Aroclor-1221	GC22	A	04/22/09 14:19
211416-001	Aroclor-1232	GC22	A	04/22/09 14:19
211416-001	Aroclor-1242	GC22	A	04/22/09 14:19
211416-001	Aroclor-1248	GC22	A	04/22/09 14:19
211416-001	Aroclor-1254	GC22	A	04/22/09 14:19
211416-001	Aroclor-1260	GC22	A	04/22/09 14:19
211416-001	TCMX	GC22	A	04/22/09 14:19
211416-001	Decachlorobiphenyl	GC22	A	04/22/09 14:19
211416-002	Aroclor-1016	GC22	A	04/22/09 14:45
211416-002	Aroclor-1221	GC22	A	04/22/09 14:45
211416-002	Aroclor-1232	GC22	A	04/22/09 14:45
211416-002	Aroclor-1242	GC22	A	04/22/09 14:45
211416-002	Aroclor-1248	GC22	A	04/22/09 14:45
211416-002	Aroclor-1254	GC22	A	04/22/09 14:45
211416-002	Aroclor-1260	GC22	A	04/22/09 14:45
211416-002	TCMX	GC22	A	04/22/09 14:45
211416-002	Decachlorobiphenyl	GC22	A	04/22/09 14:45
QC492644	Aroclor-1016	GC22	A	04/22/09 13:00
QC492644	Aroclor-1221	GC22	A	04/22/09 13:00
QC492644	Aroclor-1232	GC22	A	04/22/09 13:00
QC492644	Aroclor-1242	GC22	A	04/22/09 13:00
QC492644	Aroclor-1248	GC22	A	04/22/09 13:00
QC492644	Aroclor-1254	GC22	A	04/22/09 13:00
QC492644	Aroclor-1260	GC22	A	04/22/09 13:00
QC492644	TCMX	GC22	A	04/22/09 13:00
QC492644	Decachlorobiphenyl	GC22	A	04/22/09 13:00
QC492645	Aroclor-1016	GC22	A	04/22/09 16:25
QC492645	Aroclor-1260	GC22	A	04/22/09 16:25
QC492645	TCMX	GC22	A	04/22/09 16:25
QC492645	Decachlorobiphenyl	GC22	A	04/22/09 16:25
QC492646	Aroclor-1016	GC22	A	04/22/09 16:51
QC492646	Aroclor-1260	GC22	A	04/22/09 16:51
QC492646	TCMX	GC22	A	04/22/09 16:51
QC492646	Decachlorobiphenyl	GC22	A	04/22/09 16:51

Laboratory Job Number 211416

ANALYTICAL REPORT

Metals

Matrix: Water

Metals Analytical Report

Lab #:	211416	Project#:	Y0239-04.A3
Client:	Baseline Environmental	Location:	Doyle Drive
Field ID:	E027	Units:	ug/L
Lab ID:	211416-001	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Arsenic	300	1.0	5.000	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Cadmium	16	1.0	5.000	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Chromium	2,400	6.0	50.00	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Copper	1,800	6.4	50.00	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Lead	1,500	5.0	50.00	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Mercury	0.34	0.20	1.000	150071	04/17/09	04/17/09	METHOD	EPA 7470A	
Nickel	2,800	6.2	50.00	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Silver	4.9	1.0	5.000	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	
Zinc	3,200	21	50.00	149940	04/14/09	04/15/09	EPA 200.8	EPA 6020	

RL= Reporting Limit

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2.1

Metals Analytical Report

Lab #:	211416	Project#:	Y0239-04.A3
Client:	Baseline Environmental	Location:	Doyle Drive
Field ID:	E026	Units:	ug/L
Lab ID:	211416-002	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Arsenic	220	1.0	5.000	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Cadmium	8.7	1.0	5.000	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Chromium	1,500	6.0	50.00	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Copper	820	1.0	5.000	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Lead	710	1.0	5.000	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Mercury	ND	0.20	1.000	150071	04/17/09	04/17/09	METHOD		EPA 7470A
Nickel	1,800	6.2	50.00	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Silver	3.0	1.0	5.000	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020
Zinc	1,600	21	50.00	149940	04/14/09	04/15/09	EPA	200.8	EPA 6020

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 200.8
Project#:	Y0239-04.A3	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC491709	Batch#:	149940
Matrix:	Water	Prepared:	04/14/09
Units:	ug/L	Analyzed:	04/14/09

Analyte	Result	RL
Arsenic	ND	1.0
Cadmium	ND	1.0
Chromium	ND	1.0
Copper	ND	1.0
Lead	ND	1.0
Nickel	ND	1.0
Silver	ND	1.0
Zinc	ND	5.0

ND= Not Detected

RL= Reporting Limit

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4.0

Batch QC Report

Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 200.8
Project#:	Y0239-04.A3	Analysis:	EPA 6020
Matrix:	Water	Batch#:	149940
Units:	ug/L	Prepared:	04/14/09
Diln Fac:	1.000	Analyzed:	04/14/09

Type: BS Lab ID: QC491710

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	90.99	91	80-120
Cadmium	100.0	100.8	101	80-120
Chromium	100.0	107.8	108	80-120
Copper	100.0	95.86	96	80-120
Lead	100.0	106.8	107	80-120
Nickel	100.0	109.6	110	80-120
Silver	100.0	97.19	97	80-120
Zinc	100.0	89.21	89	80-120

Type: BSD Lab ID: QC491711

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	88.75	89	80-120	2	20
Cadmium	100.0	99.57	100	80-120	1	20
Chromium	100.0	105.8	106	80-120	2	20
Copper	100.0	93.42	93	80-120	3	20
Lead	100.0	103.6	104	80-120	3	20
Nickel	100.0	108.1	108	80-120	1	20
Silver	100.0	94.39	94	80-120	3	20
Zinc	100.0	89.99	90	80-120	1	20

RPD= Relative Percent Difference

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5.0

Batch QC Report

Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 200.8
Project#:	Y0239-04.A3	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	149940
MSS Lab ID:	211328-001	Sampled:	04/09/09
Matrix:	Water	Received:	04/10/09
Units:	ug/L	Prepared:	04/14/09
Diln Fac:	5.000	Analyzed:	04/14/09

Type: MS Lab ID: QC491712

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	14.00	100.0	114.5	101	75-125
Cadmium	0.1490	100.0	101.0	101	75-125
Chromium	0.6010	100.0	106.1	105	75-125
Copper	0.8470	100.0	102.3	101	75-125
Lead	<0.1101	100.0	101.2	101	75-125
Nickel	3.957	100.0	110.3	106	75-125
Silver	<0.07314	100.0	93.80	94	75-125
Zinc	10.50	100.0	112.3	102	75-125

Type: MSD Lab ID: QC491713

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Arsenic	100.0	114.7	101	75-125	0 20
Cadmium	100.0	101.4	101	75-125	0 20
Chromium	100.0	107.3	107	75-125	1 20
Copper	100.0	103.0	102	75-125	1 20
Lead	100.0	101.7	102	75-125	0 20
Nickel	100.0	109.9	106	75-125	0 20
Silver	100.0	93.85	94	75-125	0 20
Zinc	100.0	113.0	102	75-125	1 20

RPD= Relative Percent Difference

Batch QC Report
Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 200.8
Project#:	Y0239-04.A3	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	149940
MSS Lab ID:	211328-001	Sampled:	04/09/09
Lab ID:	QC491714	Received:	04/10/09
Matrix:	Water	Analyzed:	04/14/09
Units:	ug/L		

Analyte	MSS	Result	MSS RL	Result	RL	% Diff	Lim
Arsenic		14.00	1.000	14.63	2.500	5	10
Cadmium		0.1490	1.000	ND	2.500	NC	10
Chromium		0.6010	1.000	1.383 J	3.000	NC	10
Copper		0.8470	1.000	1.098 J	3.186	NC	10
Lead	ND		1.000	ND	2.500	NC	10
Nickel		3.957	1.000	4.290	2.792	NC	10
Silver	ND		1.000	ND	2.500	NC	10
Zinc		10.50	5.000	21.19	10.32	NC	10

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	EPA 200.8
Project#:	Y0239-04.A3	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Post Digest Spike	Batch#:	149940
MSS Lab ID:	211328-001	Sampled:	04/09/09
Lab ID:	QC491715	Received:	04/10/09
Matrix:	Water	Analyzed:	04/14/09
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	14.00	500.0	491.4	95	75-125
Cadmium	0.1490	500.0	478.4	96	75-125
Chromium	0.6010	500.0	482.1	96	75-125
Copper	0.8470	500.0	463.5	93	75-125
Lead	<0.1101	500.0	470.0	94	75-125
Nickel	3.957	500.0	490.9	97	75-125
Silver	<0.07314	500.0	408.9	82	75-125
Zinc	10.50	500.0	452.0	88	75-125

Batch QC Report

Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	150071
Lab ID:	QC492222	Prepared:	04/17/09
Matrix:	Water	Analyzed:	04/17/09
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected

RL= Reporting Limit

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14.0

Batch QC Report

Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	150071
Matrix:	Water	Prepared:	04/17/09
Units:	ug/L	Analyzed:	04/17/09
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC492223	5.000	5.180	104	80-120		
BSD	QC492224	5.000	4.990	100	80-120	4	20

RPD= Relative Percent Difference

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Batch QC Report

Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	150071
Field ID:	ZZZZZZZZZZ	Sampled:	04/08/09
MSS Lab ID:	211260-002	Received:	04/08/09
Matrix:	Water	Prepared:	04/17/09
Units:	ug/L	Analyzed:	04/17/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC492225	<0.03335	5.000	5.410	108	75-125		
MSD	QC492226		5.000	5.310	106	75-125	2	20

RPD= Relative Percent Difference

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16.0

Batch QC Report
Metals Analytical Report

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	150071
MSS Lab ID:	211260-002	Sampled:	04/08/09
Lab ID:	QC492227	Received:	04/08/09
Matrix:	Water	Analyzed:	04/17/09

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

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17.0

REPORTING SUMMARY FOR 211416 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A S	C D	C R	C U	P B	H G	N I	A G	Z N	
211416-001	MET16	04/15/09	17:32	5.0	+	+					+		
211416-001	MET16	04/15/09	17:55	50.0			+	+	+			+	
211416-001	MET06	04/15/09	19:47	50.0						+			
211416-001	MET14	04/17/09	15:41	1.0					+				
211416-002	MET16	04/15/09	17:43	5.0	+	+		+	+		+		
211416-002	MET16	04/15/09	18:06	50.0			+					+	
211416-002	MET06	04/15/09	19:58	50.0						+			
211416-002	MET14	04/17/09	15:43	1.0					+				
QC491709	MET16	04/14/09	19:49	1.0	+	+	+	+	+	+	+	+	
QC491710	MET16	04/14/09	20:00	1.0	+	+	+	+	+	+	+	+	
QC491711	MET16	04/14/09	20:12	1.0	+	+	+	+	+	+	+	+	
QC491712	MET16	04/14/09	20:46	5.0	+	+	+	+	+	+	+	+	
QC491713	MET16	04/14/09	20:57	5.0	+	+	+	+	+	+	+	+	
QC491714	MET16	04/14/09	20:34	25.0	+	+	+	+	+	+	+	+	
QC491714	MET16	04/15/09	11:27	100.0									
QC491715	MET16	04/14/09	21:08	5.0	+	+	+	+	+	+	+	+	
QC491715	MET16	04/15/09	11:39	20.0									
QC492222	MET14	04/17/09	15:02	1.0						+			
QC492223	MET14	04/17/09	15:04	1.0						+			
QC492224	MET14	04/17/09	15:07	1.0						+			
QC492225	MET14	04/17/09	15:13	1.0						+			
QC492226	MET14	04/17/09	15:16	1.0						+			
QC492227	MET14	04/17/09	15:11	5.0						+			

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899150750

Instrument : MET16
 Method : EPA 6020

Begun : 04/14/09 16:30
 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09d14q00001	TUN				04/14/09 16:30	1.0	1	
002	09d14q00002	X	RINSE			04/14/09 16:36	1.0	2	
003	09d14q00003	X	CALBLANK			04/14/09 16:48	1.0	2	
004	09d14q00004	X				04/14/09 16:59	1.0	3 2	
005	09d14q00005	ICALBLK	CALBLANK			04/14/09 17:10	1.0	2	
006	09d14q00006	ICAL				04/14/09 17:22	1.0	3 2	
007	09d14q00007	ICAL				04/14/09 17:33	1.0	4 2	
008	09d14q00008	ICAL				04/14/09 17:44	1.0	5 2	
009	09d14q00009	ICAL				04/14/09 17:56	1.0	6 2	
010	09d14q00010	ICAL				04/14/09 18:07	1.0	7 2	
011	09d14q00011	ICAL				04/14/09 18:19	1.0	8 2	
012	09d14q00012	ICV				04/14/09 18:30	1.0	9 2	
014	09d14q00014	ICB				04/14/09 18:52	1.0	2	
015	09d14q00015	ICSA				04/14/09 19:03	1.0	10 2	7:CA=300000
016	09d14q00016	ICSAB				04/14/09 19:15	1.0	11 2	10:CA=310000
017	09d14q00017	X	RINSE			04/14/09 19:26	1.0	2	
018	09d14q00018	X	RINSE			04/14/09 19:38	1.0	2	
019	09d14q00019	BLANK	QC491709	Water	149940	04/14/09 19:49	1.0	2	
020	09d14q00020	BS	QC491710	Water	149940	04/14/09 20:00	1.0	2	
021	09d14q00021	BSD	QC491711	Water	149940	04/14/09 20:12	1.0	2	
022	09d14q00022	MSS	211328-001	Water	149940	04/14/09 20:23	5.0	2	1:NA=40000
023	09d14q00023	SER	QC491714	Water	149940	04/14/09 20:34	25.0	2	
024	09d14q00024	MS	QC491712	Water	149940	04/14/09 20:46	5.0	2	2:NA=41000
025	09d14q00025	MSD	QC491713	Water	149940	04/14/09 20:57	5.0	2	2:NA=40000
026	09d14q00026	PDS	QC491715	Water	149940	04/14/09 21:08	5.0	12 13 2	2:NA=49000
027	09d14q00027	CCV				04/14/09 21:19	1.0	14 2	
028	09d14q00028	X				04/14/09 21:31	1.0	2	
029	09d14q00029	CCB				04/14/09 21:42	1.0	2	
030	09d14q00030	SAMPLE	211328-003	Water	149940	04/14/09 21:53	5.0	2	1:NA=31000
031	09d14q00031	SAMPLE	211087-003	Filtrate	149940	04/14/09 22:05	5.0	2	5:NA=780000
032	09d14q00032	SAMPLE	211087-004	Filtrate	149940	04/14/09 22:16	5.0	2	5:NA=1300000
033	09d14q00033	SAMPLE	210560-001	Water	149940	04/14/09 22:27	5.0	2	
034	09d14q00034	CCV				04/14/09 22:39	1.0	14 2	
035	09d14q00035	X				04/14/09 22:50	1.0	2	
036	09d14q00036	CCB				04/14/09 23:01	1.0	2	
037	09d14q00037	ICSA				04/14/09 23:13	1.0	10 2	7:CA=300000
038	09d14q00038	ICSAB				04/14/09 23:24	1.0	11 2	10:CA=310000
039	09d14q00039	X	RINSE			04/14/09 23:36	1.0	2	
040	09d14q00040	X	RINSE			04/14/09 23:47	1.0	2	
041	09d14q00041	BLANK	QC491493	Filtrate	149890	04/14/09 23:58	1.0	2	
042	09d14q00042	BS	QC491494	Filtrate	149890	04/15/09 00:10	1.0	2	
043	09d14q00043	BSD	QC491495	Filtrate	149890	04/15/09 00:21	1.0	2	
044	09d14q00044	MSS	211287-001	Filtrate	149890	04/15/09 00:32	5.0	2	4:NA=2800000
045	09d14q00045	SER	QC491498	Filtrate	149890	04/15/09 00:44	25.0	2	
046	09d14q00046	MS	QC491496	Filtrate	149890	04/15/09 00:55	5.0	2	
047	09d14q00047	MSD	QC491497	Filtrate	149890	04/15/09 01:07	5.0	2	
048	09d14q00048	PDS	QC491499	Filtrate	149890	04/15/09 01:18	5.0	12 13 2	
049	09d14q00049	X				04/15/09 01:29	1.0	14 2	
050	09d14q00050	CCV				04/15/09 01:40	1.0	14 2	
051	09d14q00051	X				04/15/09 01:52	1.0	2	
052	09d14q00052	CCB				04/15/09 02:03	1.0	2	
053	09d14q00053	SAMPLE	211283-001	Filtrate	149890	04/15/09 02:14	5.0	2	4:NA=2700000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899150750

Instrument : MET16
 Method : EPA 6020

Begun : 04/14/09 16:30
 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
054	09d14q00054	SAMPLE	211283-002	Filtrate	149890	04/15/09 02:26	5.0	2	5:NA=2400000
055	09d14q00055	SAMPLE	211283-003	Filtrate	149890	04/15/09 02:37	5.0	2	4:NA=2400000
056	09d14q00056	SAMPLE	211283-004	Filtrate	149890	04/15/09 02:49	5.0	2	5:NA=2700000
057	09d14q00057	TUN				04/15/09 03:01	1.0	1	
058	09d14q00058	X	RINSE			04/15/09 03:07	1.0	2	
059	09d14q00059	SAMPLE	211283-005	Filtrate	149890	04/15/09 03:18	5.0	2	5:NA=2600000
060	09d14q00060	SAMPLE	211283-006	Filtrate	149890	04/15/09 03:30	5.0	2	5:NA=2700000
061	09d14q00061	SAMPLE	211283-007	Filtrate	149890	04/15/09 03:41	5.0	2	5:NA=2700000
062	09d14q00062	SAMPLE	211283-008	Filtrate	149890	04/15/09 03:53	5.0	2	4:NA=660000
063	09d14q00063	SAMPLE	211283-009	Filtrate	149890	04/15/09 04:04	5.0	2	6:NA=990000
064	09d14q00064	SAMPLE	211283-010	Filtrate	149890	04/15/09 04:16	5.0	2	5:NA=2400000
065	09d14q00065	CCV				04/15/09 04:27	1.0	14 2	
066	09d14q00066	X				04/15/09 04:38	1.0	2	
067	09d14q00067	CCB				04/15/09 04:50	1.0	2	
068	09d14q00068	SAMPLE	211322-001	Filtrate	149890	04/15/09 05:01	5.0	2	4:NA=2600000
069	09d14q00069	SAMPLE	211327-001	Filtrate	149890	04/15/09 05:13	5.0	2	2:NA=89000
070	09d14q00070	SAMPLE	211327-002	Filtrate	149890	04/15/09 05:24	5.0	2	2:NA=100000
071	09d14q00071	SAMPLE	211349-001	Water	149890	04/15/09 05:35	5.0	2	1:NA=79000
072	09d14q00072	SAMPLE	211349-002	Water	149890	04/15/09 05:47	5.0	2	
073	09d14q00073	SAMPLE	211349-003	Water	149890	04/15/09 05:58	5.0	2	
074	09d14q00074	SAMPLE	211349-004	Water	149890	04/15/09 06:09	5.0	2	
075	09d14q00075	SAMPLE	211349-005	Water	149890	04/15/09 06:21	5.0	2	2:NA=500000
076	09d14q00076	SAMPLE	211283-008	Filtrate	149890	04/15/09 06:32	10.0	2	3:NA=320000
077	09d14q00077	SAMPLE	211283-009	Filtrate	149890	04/15/09 06:43	50.0	2	1:NA=98000
078	09d14q00078	X				04/15/09 06:55	1.0	14 2	
079	09d14q00079	CCV				04/15/09 07:06	1.0	14 2	
080	09d14q00080	X				04/15/09 07:17	1.0	2	
081	09d14q00081	CCB				04/15/09 07:29	1.0	2	
082	09d14q00082	X				04/15/09 07:40	1.0	14 2	
083	09d14q00083	X				04/15/09 07:51	1.0	2	
084	09d14q00084	X				04/15/09 08:02	1.0	2	
085	09d14q00085	ICSA				04/15/09 08:14	1.0	10 2	7:CA=300000
086	09d14q00086	ICSAB				04/15/09 08:25	1.0	11 2	9:CA=310000
087	09d14q00087	X	RINSE			04/15/09 08:37	1.0	2	
088	09d14q00088	X	RINSE			04/15/09 08:48	1.0	2	
089	09d14q00089	BLANK	QC490831	Soil	149724	04/15/09 08:59	5.0	2	
090	09d14q00090	BS	QC490832	Soil	149724	04/15/09 09:11	10.0	2	
091	09d14q00091	BSD	QC490833	Soil	149724	04/15/09 09:22	10.0	2	
092	09d14q00092	MSS	211182-007	Soil	149724	04/15/09 09:34	20.0	2	2:FE=24000
093	09d14q00093	MS	QC490834	Soil	149724	04/15/09 09:45	20.0	2	1:FE=24000
094	09d14q00094	MSD	QC490835	Soil	149724	04/15/09 09:56	20.0	2	
095	09d14q00095	SAMPLE	211182-001	Soil	149724	04/15/09 10:08	20.0	2	2:FE=25000
096	09d14q00096	SAMPLE	211182-003	Soil	149724	04/15/09 10:19	20.0	2	2:FE=24000
097	09d14q00097	CCV				04/15/09 10:30	1.0	14 2	
098	09d14q00098	X				04/15/09 10:42	1.0	14 2	
099	09d14q00099	X				04/15/09 10:53	1.0	2	
100	09d14q00100	CCB				04/15/09 11:04	1.0	2	
101	09d14q00101	MSS	211328-001	Water	149940	04/15/09 11:16	20.0	2	
102	09d14q00102	SER	QC491714	Water	149940	04/15/09 11:27	100.0	2	
103	09d14q00103	PDS	QC491715	Water	149940	04/15/09 11:39	20.0	12 13 2	
104	09d14q00104	PDS	QC491499	Filtrate	149890	04/15/09 11:50	5.0	12 13 2	
105	09d14q00105	CCV				04/15/09 12:01	1.0	14 2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899150750

Instrument : MET16
 Method : EPA 6020

Begun : 04/14/09 16:30
 SOP Version : icpm_s_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
106	09d14q00106	X				04/15/09 12:13	1.0	2	
107	09d14q00107	CCB				04/15/09 12:24	1.0	2	
108	09d14q00108	SAMPLE	211182-004	Soil	149724	04/15/09 12:35	20.0	2	1:FE=21000
109	09d14q00109	SAMPLE	211182-005	Soil	149724	04/15/09 12:47	20.0	2	1:FE=22000
110	09d14q00110	SAMPLE	211182-006	Soil	149724	04/15/09 12:58	20.0	2	
111	09d14q00111	SAMPLE	211182-008	Soil	149724	04/15/09 13:09	20.0	2	1:BA=460
112	09d14q00112	SAMPLE	211182-009	Soil	149724	04/15/09 13:21	20.0	2	2:FE=21000
113	09d14q00113	TUN				04/15/09 13:32	1.0	1	
114	09d14q00114	X	RINSE			04/15/09 13:39	1.0	2	
115	09d14q00115	SAMPLE	211182-010	Soil	149724	04/15/09 13:50	20.0	2	1:MN=200
116	09d14q00116	SAMPLE	211182-011	Soil	149724	04/15/09 14:01	20.0	2	
117	09d14q00117	SAMPLE	211182-012	Soil	149724	04/15/09 14:13	20.0	2	
118	09d14q00118	SAMPLE	211182-013	Soil	149724	04/15/09 14:23	20.0	2	
119	09d14q00119	SAMPLE	211182-014	Soil	149724	04/15/09 14:33	20.0	2	
120	09d14q00120	CCV				04/15/09 14:44	1.0	14 2	
121	09d14q00121	X				04/15/09 14:55	1.0	14 2	
122	09d14q00122	X				04/15/09 15:06	1.0	2	
123	09d14q00123	CCB				04/15/09 15:18	1.0	2	
124	09d14q00124	SAMPLE	211182-015	Soil	149724	04/15/09 15:29	20.0	2	3:FE=27000
125	09d14q00125	SAMPLE	211182-016	Soil	149724	04/15/09 15:41	20.0	2	3:FE=22000
126	09d14q00126	SAMPLE	211182-017	Soil	149724	04/15/09 15:52	20.0	2	1:MN=270
127	09d14q00127	SAMPLE	211182-018	Soil	149724	04/15/09 16:03	20.0	2	
128	09d14q00128	CCV				04/15/09 16:14	1.0	14 2	
129	09d14q00129	X				04/15/09 16:26	1.0	2	
130	09d14q00130	CCB				04/15/09 16:37	1.0	2	
131	09d14q00131	SAMPLE	211182-004	Soil	149724	04/15/09 16:46	50.0	2	
132	09d14q00132	SAMPLE	211182-005	Soil	149724	04/15/09 16:58	50.0	2	
133	09d14q00133	SAMPLE	211182-008	Soil	149724	04/15/09 17:09	50.0	2	
134	09d14q00134	SAMPLE	211087-005	Filtrate	149940	04/15/09 17:21	5.0	2	3:NA=120000
135	09d14q00135	SAMPLE	211416-001	Water	149940	04/15/09 17:32	5.0	2	12:FE=180000
136	09d14q00136	SAMPLE	211416-002	Water	149940	04/15/09 17:43	5.0	2	9:FE=140000
137	09d14q00137	SAMPLE	211416-001	Water	149940	04/15/09 17:55	50.0	2	2:FE=24000
138	09d14q00138	SAMPLE	211416-002	Water	149940	04/15/09 18:06	50.0	2	1:MN=290
139	09d14q00139	CCV				04/15/09 18:17	1.0	14 2	
140	09d14q00140	X				04/15/09 18:28	1.0	2	
141	09d14q00141	CCB				04/15/09 18:40	1.0	2	
142	09d14q00142	ICSA				04/15/09 18:51	1.0	10 2	7:CA=300000
143	09d14q00143	ICSA				04/15/09 19:03	1.0	11 2	12:CA=310000
144	09d14q00144	X	RINSE			04/15/09 19:14	1.0	2	
145	09d14q00145	X	RINSE			04/15/09 19:25	1.0	2	
146	09d14q00146	X	RINSE			04/15/09 19:37	1.0	2	

JYF 04/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 143.

Standards used: 1=S11767 2=S11768 3=S11771 4=S11772 5=S11773 6=S11774 7=S11769 8=S11770 9=S11775 10=S11777 11=S11778
 12=S10997 13=S10998 14=S11776

Page 3 of 3

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899150750

Date : 04/14/09
 Sequence : MET16 09d14q00

Reference : 09d14q00005
 Analyzed : 04/14/09 17:10

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2420938	2046299	49035	751226	154860	30632	2360023	2266497	2432797	3473572
		LOWER LIMIT	726281	613890	14711	225368	46458	9190	708007	679949	729839	1042072
		UPPER LIMIT	2905126	2455559	58842	901471	185832	36758	2832028	2719796	2919356	4168286
014	ICB		2584986	2181903	52272	756995	154139	31684	2431462	2285369	2554628	3527775
015	ICSA		1780446	1781686	52078	737216	139221	29673	2079912	1832439	2266880	3351393
016	ICSAB		1485490	1545956	44246	667119	127430	26411	1952424	1799196	2090626	3214386
019	BLANK	QC491709	1540966	1549615	37526	620930	133337	26291	2179039	2301029	2162235	3447311
020	BS	QC491710	1563488	1615076	39638	601315	130025	27076	2152149	2199462	2202973	3440659
021	BSD	QC491711	1662678	1648930	40461	618228	130858	27779	2170162	2185097	2235593	3464483
022	MSS	211328-001	1970732	1959746	46121	679523	139634	29121	2383043	2248386	2455227	3645438
023	SER	QC491714	2105614	1977595	46523	700955	144906	29631	2403836	2318107	2469941	3614278
024	MS	QC491712	2024496	1968794	45630	692691	141072	28581	2340032	2185294	2425889	3581064
025	MSD	QC491713	2018078	1953250	46113	695941	141419	28844	2325946	2182247	2421236	3557398
026	PDS	QC491715	2031792	1982243	46005	694837	142119	28545	2301646	2139578	2435011	3549333
027	CCV		2114055	1999889	46476	701171	143027	28467	2345108	2193597	2452730	3536263
029	CCB		2273120	1978699	44553	695011	141340	27958	2357680	2267532	2409946	3490349
030	SAMPLE	211328-003	2106431	1991911	46516	697628	142697	28869	2384189	2259369	2447089	3598215
031	SAMPLE	211087-003	1918040	2148622	55679	767890	138477	29562	2221082	1792736	2761806	3337757
032	SAMPLE	211087-004	1778310	1968036	56335	728599	132013	29144	1964130	1507461	2198698	2905756
041	BLANK	QC491493	1860576	1838191	42347	646983	142153	30304	2453363	2437338	2517359	3806896
042	BS	QC491494	1527475	1575130	36893	571095	131546	27947	2222277	2258468	2273584	3561524
043	BSD	QC491495	1671855	1683922	39115	597228	131942	28813	2298472	2276467	2362504	3651634
044	MSS	211287-001	1575023	1816042	50920	610058	109058	25689	1858505	1323226	2115886	2758180
045	SER	QC491498	2280070	2366464	58088	758498	145393	32118	2436298	1859541	2722234	3525330
046	MS	QC491496	1582620	1854372	51738	619601	110863	25950	1905030	1346120	2156483	2794148
047	MSD	QC491497	1578253	1842914	52050	629484	112601	26127	1899888	1351462	2166957	2794220
048	PDS	QC491499	1610729	1871691	50802	623361	111552	25661	1914118	1372432	2193189	2873432
053	SAMPLE	211283-001	1537007	1744056	48918	585262	105064	24883	1824930	1327225	2061988	2726207
054	SAMPLE	211283-002	1592006	1851119	50077	618723	110434	25390	1880481	1387599	2159459	2851631
055	SAMPLE	211283-003	1593477	1813601	49754	617179	110516	25549	1897818	1387079	2128508	2818977
056	SAMPLE	211283-004	1509577	1757028	47994	597349	106261	24577	1847107	1355876	2092290	2774016
059	SAMPLE	211283-005	1460920	1681176	45337	567036	102338	23776	1819113	1358277	2029953	2752731
060	SAMPLE	211283-006	1440424	1650386	45890	577709	104346	23954	1788528	1335046	2021983	2731608
061	SAMPLE	211283-007	1465964	1670358	46211	577894	103469	24033	1812454	1340791	2028415	2755634
062	SAMPLE	211283-008	2037111	2098281	49880	667811	127404	28293	2252309	1780558	2502236	3352820
063	SAMPLE	211283-009	1936654	2060453	49309	637831	120177	27318	2206510	1711672	2459473	3279928
064	SAMPLE	211283-010	1499646	1743546	46426	579918	103635	24111	1873207	1377517	2109049	2829205
065	CCV		2501350	2364140	52784	721006	145097	32645	2618045	2237153	2826945	3788532
067	CCB		2572161	2339680	50499	704024	147174	32244	2664870	2350013	2813518	3772428
068	SAMPLE	211322-001	1437605	1648387	44857	543575	98237	23542	1819135	1343348	2039148	2760947
069	SAMPLE	211327-001	2397698	2280821	49548	697750	142821	31098	2521241	2150205	2767787	3662976
070	SAMPLE	211327-002	2370701	2232638	47932	659691	137490	30295	2471537	2147518	2699765	3625254
076	SAMPLE	211283-008	2184512	2129324	46015	613179	121161	27952	2356992	1912825	2568484	3425744
077	SAMPLE	211283-009	2398906	2258877	48095	653654	133988	30490	2530361	2146840	2741311	3628675
079	CCV		2429575	2293926	48316	634754	131863	31176	2570863	2231957	2806370	3708660
081	CCB		2532291	2287938	46884	622850	131414	30803	2651434	2336512	2815263	3727363
089	BLANK	QC490831	2483270	2236695	43176	616146	134403	29384	2590433	2352038	2772598	3695004
090	BS	QC490832	2392738	2178132	41828	610678	128445	27783	2509473	2253582	2704872	3627820
091	BSD	QC490833	2392019	2190970	41846	597995	126166	27811	2481851	2242123	2677086	3592227
092	MSS	211182-007	2419774	2377757	46320	619696	123088	28996	2547375	2302830	2905577	3662653
093	MS	QC490834	2365616	2317633	44951	606650	121421	28614	2491439	2240986	2856437	3610392

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899150750

Date : 04/14/09
 Sequence : MET16 09d14q00

Reference : 09d14q00005
 Analyzed : 04/14/09 17:10

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
094	MSD	QC490835	2367633	2310653	44776	610419	121170	28301	2491700	2228481	2838006	3605663
095	SAMPLE	211182-001	2321121	2309601	44740	611959	122625	28429	2488606	2225951	2879934	3623597
096	SAMPLE	211182-003	2276741	2258541	43701	597439	120902	28241	2478168	2228225	2902305	3574623
097	CCV		2178013	2121898	40698	575070	121965	27025	2425136	2167909	2639142	3561255
100	CCB		2120817	2075514	40055	574905	122953	27240	2474612	2228242	2607358	3529060
101	MSS	211328-001	2095430	2047095	39511	568257	123096	26931	2487816	2249977	2585004	3564004
102	SER	QC491714	2061519	2020985	39420	579818	124966	26762	2471258	2265643	2562377	3512628
103	PDS	QC491715	2041646	2056905	39099	567329	120235	26018	2374594	2143393	2581177	3496207
104	PDS	QC491499	1320455	1532746	35691	468251	87071	20119	1725965	1298202	1944446	2682463
105	CCV		2329229	2192821	43089	632860	131080	28245	2469052	2211863	2694364	3582208
107	CCB		2270899	2159687	41719	603028	127502	27902	2515952	2282432	2675291	3570935
108	SAMPLE	211182-004	2183911	2218188	42258	609702	123285	27478	2479870	2291508	2985267 *	3598219
109	SAMPLE	211182-005	2141251	2189248	41711	583517	117796	27160	2458844	2253995	2929197 *	3553762
110	SAMPLE	211182-006	2089802	2162607	41857	579202	117586	27015	2405445	2225783	2809168	3505210
111	SAMPLE	211182-008	2056609	2144704	40376	570363	116671	26713	2429946	2241499	2955163 *	3522938
112	SAMPLE	211182-009	1995440	2102583	40076	507284	109797	26249	2421314	2231374	2745962	3492556
115	SAMPLE	211182-010	1901009	2029801	39841	564042	114286	25982	2354026	2205795	2621492	3433540
116	SAMPLE	211182-011	1893881	2027600	39186	565153	114468	25649	2384701	2228993	2738619	3469803
117	SAMPLE	211182-012	1872058	2011938	38692	542062	112426	25579	2375707	2223118	2702520	3464409
118	SAMPLE	211182-013	1898990	2072896	38452	540714	111553	25446	2454380	2279304	2731857	3580994
119	SAMPLE	211182-014	1832844	1997463	38962	538059	111182	25858	2383173	2248475	2630690	3492816
120	CCV		1812439	1882765	36030	526060	111358	24670	2272880	2133446	2453833	3366209
123	CCB		1809883	1866963	35763	516658	111512	24616	2383654	2245637	2494707	3436863
124	SAMPLE	211182-015	1739395	2003912	39132	533726	104831	24718	2328269	2195373	2705530	3439716
125	SAMPLE	211182-016	1744759	1979591	38615	544410	108154	25149	2334580	2221826	2706053	3448512
126	SAMPLE	211182-017	1674512	1862238	36740	523861	108450	24565	2293314	2188587	2528088	3372465
127	SAMPLE	211182-018	1697931	1872463	34473	518096	107171	23361	2305142	2210409	2510393	3378847
128	CCV		1686953	1803885	34878	508440	108115	23823	2268532	2165709	2416771	3411484
130	CCB		1732804	1837956	34949	498894	107449	24243	2388289	2269040	2479851	3446768
131	SAMPLE	211182-004	1654051	1803283	35903	505269	106873	24359	2285749	2240433	2511702	3370038
132	SAMPLE	211182-005	1632712	1810428	35221	503478	105738	24232	2307006	2239016	2512767	3367055
133	SAMPLE	211182-008	1663460	1808337	35884	494652	104693	24604	2333332	2276907	2567090	3426848
134	SAMPLE	211087-005	1637551	1778075	34398	486531	103089	23166	2205544	2048551	2437231	3275145
135	SAMPLE	211416-001	1401798	2451030	46000	650328	99178	24597	2139601	2005139	4551810 *	3369538
136	SAMPLE	211416-002	1487459	2299898	41175	577826	99842	24151	2205504	2061974	3825228 *	3401575
137	SAMPLE	211416-001	1601325	1838813	34200	502549	104913	23715	2257952	2189448	2620364	3334135
138	SAMPLE	211416-002	1629862	1859011	33872	490572	104517	23461	2299261	2239457	2592489	3404006
139	CCV		1641388	1762720	33544	476381	102965	23129	2238842	2185080	2405606	3334601
141	CCB		1587708	1719597	33152	464909	101407	23136	2284412	2236277	2357256	3322496
142	ICSA		1323968	1574323	32522	442081	88744	21320	2007381	1802324	2228885	3167533
143	ICSA		1371303	1625752	33278	443323	89177	21608	2013112	1807453	2275229	3175735

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899150750

Date : 04/14/09
 Sequence : MET16 09d14q00

Reference : 09d14q00005
 Analyzed : 04/14/09 17:10

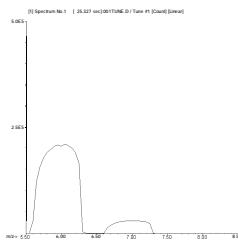
#	Type	Sample ID	SC A	SC E	GE E	IN A	TB A	LI A	SC H	GE H	BI A	Y A
		IB+ICALBLK STD	2046299	49035	30632	2360023	3473572	2420938	751226	154860	2266497	2432797
		LOWER LIMIT	1227779	29421	18379	1416014	2084143	1452563	450736	92916	1359898	1459678
		UPPER LIMIT	2557874	61294	38290	2950029	4341965	3026173	939033	193575	2833121	3040996
033	SAMPLE	210560-001	2303916	55185	33713	2595283	3764638	2525909	792010	161889	2351160	2689228
034	CCV		2256114	51828	31657	2510136	3703991	2517479	757504	150856	2220615	2662386
036	CCB		2228191	50476	31366	2530493	3696003	2513186	735915	150697	2325328	2632289
037	ICSA		1749080	47750	27885	2105409	3397553	1624811	679157	128478	1849457	2280403
038	ICSAB		1647685	43991	26539	2026925	3347183	1521026	626054	119843	1850757	2210908
050	CCV		2510304	56113	34313	2691004	3831359	2646075	771359	160099	2289144	2957386
052	CCB		2398644	53692	33984	2696342	3779678	2613704	767159	159948	2324443	2846159
071	SAMPLE	211349-001	2181728	45902	30251	2484606	3655528	2432932	641689	136382	2180721	2678512
072	SAMPLE	211349-002	2264487	47983	31617	2583041	3715434	2480971	651439	138808	2311426	2765213
073	SAMPLE	211349-003	2266562	47187	31195	2597076	3733627	2463682	657483	138190	2311683	2760437
074	SAMPLE	211349-004	2255885	48505	31060	2614024	3713541	2480652	663587	140870	2340632	2755065
075	SAMPLE	211349-005	1971990	43376	26523	2238618	3324709	2088011	590642	117385	1902155	2441912
085	ICSA		2072120	45858	27381	2294080	3523854	2135010	591546	114202	1872045	2607681
086	ICSAB		2080890	44730	27274	2281324	3517985	2228965	602485	117546	1884534	2615100

MET16 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\09D14q00.B\001TUNE.D
Date Acquired: Apr 14 2009 04:30 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s11767
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

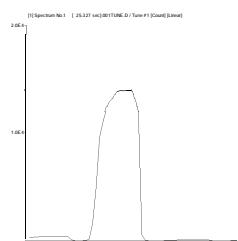
Element	Actual	Required	Flag
7 Li	0.98	5.00	
59 Co	1.55	5.00	
115 In	1.18	5.00	
205 Tl	1.43	5.00	

**7 Li****Mass Calib.**

Actual: 7.00
 Required: 6.90 - 7.10
 Flag:

Peak Width

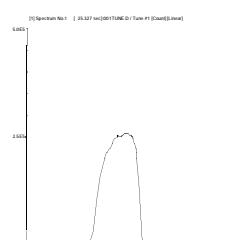
Actual: 0.60
 Required: 0.90
 Flag:

**59 Co****Mass Calib.**

Actual: 58.90
 Required: 58.90 - 59.10
 Flag:

Peak Width

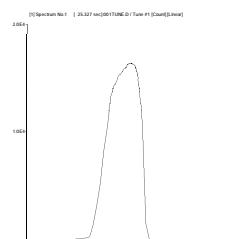
Actual: 0.55
 Required: 0.90
 Flag:

**115 In****Mass Calib.**

Actual: 114.90
 Required: 114.90 - 115.10
 Flag:

Peak Width

Actual: 0.55
 Required: 0.90
 Flag:

**205 Tl****Mass Calib.**

Actual: 204.95
 Required: 204.90 - 205.10
 Flag:

Peak Width

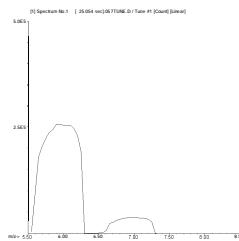
Actual: 0.60
 Required: 0.90
 Flag:

MET16 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\09D14q00.B\057TUNE.D
Date Acquired: Apr 15 2009 03:01 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s11767
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

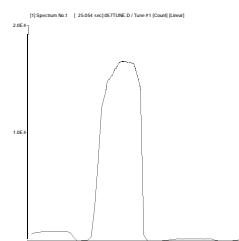
Element	Actual	Required	Flag
7 Li	2.88	5.00	
59 Co	3.35	5.00	
115 In	1.96	5.00	
205 Tl	1.60	5.00	

**7 Li****Mass Calib.**

Actual: 7.00
 Required: 6.90 - 7.10
 Flag:

Peak Width

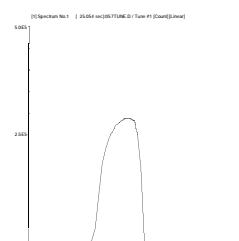
Actual: 0.65
 Required: 0.90
 Flag:

**59 Co****Mass Calib.**

Actual: 58.90
 Required: 58.90 - 59.10
 Flag:

Peak Width

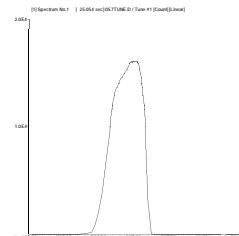
Actual: 0.55
 Required: 0.90
 Flag:

**115 In****Mass Calib.**

Actual: 114.90
 Required: 114.90 - 115.10
 Flag:

Peak Width

Actual: 0.55
 Required: 0.90
 Flag:

**205 Tl****Mass Calib.**

Actual: 205.00
 Required: 204.90 - 205.10
 Flag:

Peak Width

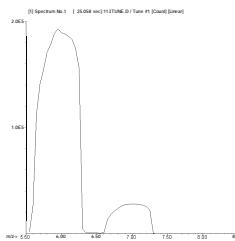
Actual: 0.60
 Required: 0.90
 Flag:

MET16 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\09D14q00.B\113TUNE.D
 Date Acquired: Apr 15 2009 01:32 pm
 Acq. Method: TN6020.M
 Operator:
 Sample Name: tun,s11767
 Misc Info:
 Vial Number: 1307
 Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

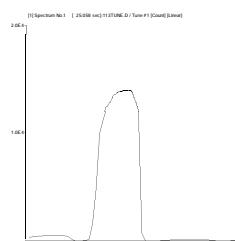
Element	Actual	Required	Flag
7 Li	1.26	5.00	
59 Co	2.20	5.00	
115 In	1.24	5.00	
205 Tl	1.48	5.00	

**7 Li****Mass Calib.**

Actual: 7.00
 Required: 6.90 - 7.10
 Flag:

Peak Width

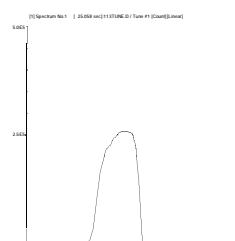
Actual: 0.60
 Required: 0.90
 Flag:

**59 Co****Mass Calib.**

Actual: 58.90
 Required: 58.90 - 59.10
 Flag:

Peak Width

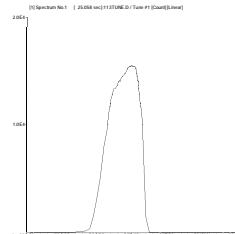
Actual: 0.55
 Required: 0.90
 Flag:

**115 In****Mass Calib.**

Actual: 114.90
 Required: 114.90 - 115.10
 Flag:

Peak Width

Actual: 0.55
 Required: 0.90
 Flag:

**205 Tl****Mass Calib.**

Actual: 204.95
 Required: 204.90 - 205.10
 Flag:

Peak Width

Actual: 0.60
 Required: 0.90
 Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 METALS Water: EPA 6020

Inst : MET16

Reviewer : ---

Calnum : 899150750001

Date : 14-APR-2009 17:10

Units : ug/L

X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09d14q00006	899150750006		14-APR-2009 17:22	S11771, S11768
L2	09d14q00007	899150750007		14-APR-2009 17:33	S11772, S11768
L3	09d14q00008	899150750008		14-APR-2009 17:44	S11773, S11768
L4	09d14q00009	899150750009		14-APR-2009 17:56	S11774, S11768
L5	09d14q00010	899150750010		14-APR-2009 18:07	S11769, S11768
L6	09d14q00011	899150750011		14-APR-2009 18:19	S11770, S11768

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	MnR^2	Flg
Cadmium	A	0.0412	0.0351	0.0367	0.0359	0.0350	0.0353	BLNK	-0.0053	28.3958		0.0365	1.000	0.995	
Lead	A	0.5313	0.3703	0.3430	0.3145	0.2997	0.3041	BLNK	-0.0643	3.29895		0.3605	1.000	0.995	
Silver	A	0.1680	0.1625	0.1567	0.1538	0.1513	0.1625	BLNK	-0.0051	6.23941		0.1591	0.999	0.995	
Arsenic	E	0.3797	0.3153	0.2829	0.2822	0.2797	0.2835	BLNK	-0.0154	3.53754		0.3039	1.000	0.995	
Chromium	E	6.1968	3.0013	2.5957	2.1533	2.0588	2.0354	BLNK	-0.1641	0.49062		3.0069	1.000	0.995	
Copper	E	10.242	5.8040	5.2391	4.7342	4.4610	4.4047	BLNK	-0.0753	0.22652		5.8142	1.000	0.995	
Nickel	E	1.2985	1.0618	1.1121	1.0084	0.9646	0.9351	BLNK	-0.0225	1.06272		1.0634	1.000	0.995	
Zinc	E	6.1867	1.8028	1.3746	0.6446	0.5440	0.5461	BLNK	-0.5437	1.83793		1.8498	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Cadmium	A	0.100	12	0.500	-1	1.000	4	10.00	2	100.0	-1	200.0	0
Lead	A	0.100	11	0.500	9	1.000	7	10.00	3	100.0	-1	200.0	0
Silver	A	0.100	0	0.500	0	1.000	-3	10.00	-4	100.0	-6	200.0	1
Arsenic	E	0.100	19	0.500	8	1.000	-1	10.00	0	100.0	-1	200.0	0
Chromium	E	0.100	40	0.500	14	1.000	11	10.00	4	100.0	1	200.0	0
Copper	E	0.100	57	0.500	16	1.000	11	10.00	6	100.0	1	200.0	0
Nickel	E	0.100	16	0.500	8	1.000	16	10.00	7	100.0	2	200.0	-1
Zinc	E	0.100	493	0.500	123	1.000	98	10.00	13	100.0	-1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

Page 1 of 1

899150750001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 METALS Water
EPA 6020

Inst : MET16

Calnum : 899150750001

Cal Date : 14-APR-2009

ICV 899150750012 (09d14q00012 14-APR-2009) stds: S11775, S11768

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Cadmium	A	0.0365	0.0370	100.0	105.2	ug/L	5	10	
Lead	A	0.3605	0.3075	100.0	101.4	ug/L	1	10	
Silver	A	0.1591	0.1578	100.0	98.46	ug/L	-2	10	
Arsenic	E	0.3039	0.2839	100.0	100.4	ug/L	0	10	
Chromium	E	3.0069	2.0292	100.0	99.39	ug/L	-1	10	
Copper	E	5.8142	4.4457	100.0	100.6	ug/L	1	10	
Nickel	E	1.0634	0.9582	100.0	101.8	ug/L	2	10	
Zinc	E	1.8498	0.5469	100.0	99.97	ug/L	0	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750014 File : 09d14q00014 Time : 14-APR-2009 18:52
Cal : 899150750001 Caldate : 14-APR-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Cadmium	A	ND	0.1000	0.02757	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Copper	E	ND	0.1000	0.08496	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	2584986	6.78
Scandium	A	2046299	2181903	6.63
Scandium	E	49035	52272	6.60
Scandium	H	751226	756995	0.77
Germanium	H	154860	154139	-0.47
Germanium	E	30632	31684	3.43
Indium	A	2360023	2431462	3.03
Bismuth	A	2266497	2285369	0.83
Yttrium	A	2432797	2554628	5.01
Terbium	A	3473572	3527775	1.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750015 File : 09d14q00015 Time : 14-APR-2009 19:03
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11777, S11768

Analyte	Ch	Quant	IQL	Units	Flags
Cadmium	A	2.059	0.1000	ug/L	!a+
Lead	A	0.8880	0.1000	ug/L	!a+
Silver	A	0.2184	0.1000	ug/L	!a+
Arsenic	E	0.2860	0.1000	ug/L	!a+
Chromium	E	1.638	0.1000	ug/L	!a+
Copper	E	3.365	0.1000	ug/L	!a+
Nickel	E	2.601	0.1000	ug/L	!a+
Zinc	E	3.781	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	96840	ug/L	97
Calcium	A	300000	303100	ug/L	101
Magnesium	A	100000	94580	ug/L	95
Molybdenum	A	2000	2098	ug/L	105
Potassium	A	100000	100000	ug/L	100
Sodium	E	250000	246100	ug/L	98
Iron	H	250000	240600	ug/L	96

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1780446	-26.46
Scandium	A	2046299	1781686	-12.93
Scandium	E	49035	52078	6.21
Scandium	H	751226	737216	-1.86
Germanium	H	154860	139221	-10.10
Germanium	E	30632	29673	-3.13
Indium	A	2360023	2079912	-11.87
Bismuth	A	2266497	1832439	-19.15
Yttrium	A	2432797	2266880	-6.82
Terbium	A	3473572	3351393	-3.52

!=warning +=high bias a=ICSA

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899150750015

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
 Seqnum : 899150750016 File : 09d14q00016 Time : 14-APR-2009 19:15
 Cal : 899150750001 Caldate : 14-APR-2009
 Standards: S11778, S11768

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Cadmium	A	100.0	101.6	ug/L	2	20		
Silver	A	50.00	48.73	ug/L	-3	20		
Arsenic	E	100.0	105.3	ug/L	5	20		
Chromium	E	200.0	204.2	ug/L	2	20		
Copper	E	200.0	180.4	ug/L	-10	20		
Nickel	E	200.0	187.3	ug/L	-6	20		
Zinc	E	100.0	90.05	ug/L	-10	20		

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	751226	667119	-11.20
Scandium	A	2046299	1545956	-24.45
Scandium	E	49035	44246	-9.77
Germanium	H	154860	127430	-17.71
Germanium	E	30632	26411	-13.78
Indium	A	2360023	1952424	-17.27
Yttrium	A	2432797	2090626	-14.06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750027 File : 09d14q00027 Time : 14-APR-2009 21:19
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11776, S11768

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Cadmium	A	0.0365	0.0358	100.0	101.7	ug/L	2	10	
Lead	A	0.3605	0.3026	100.0	99.76	ug/L	0	10	
Silver	A	0.1591	0.1535	100.0	95.78	ug/L	-4	10	
Arsenic	E	0.3039	0.2854	100.0	101.0	ug/L	1	10	
Chromium	E	3.0069	2.0982	100.0	102.8	ug/L	3	10	
Copper	E	5.8142	4.5053	100.0	102.0	ug/L	2	10	
Nickel	E	1.0634	0.9914	100.0	105.3	ug/L	5	10	
Zinc	E	1.8498	0.5489	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	2114055	-12.68
Scandium	A	2046299	1999889	-2.27
Scandium	E	49035	46476	-5.22
Scandium	H	751226	701171	-6.66
Germanium	H	154860	143027	-7.64
Germanium	E	30632	28467	-7.07
Indium	A	2360023	2345108	-0.63
Bismuth	A	2266497	2193597	-3.22
Yttrium	A	2432797	2452730	0.82
Terbium	A	3473572	3536263	1.80

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750029 File : 09d14q00029 Time : 14-APR-2009 21:42
Cal : 899150750001 Caldate : 14-APR-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Cadmium	A	ND	0.1000	0.02757	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Copper	E	ND	0.1000	0.08496	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	2273120	-6.11
Scandium	A	2046299	1978699	-3.30
Scandium	E	49035	44553	-9.14
Scandium	H	751226	695011	-7.48
Germanium	H	154860	141340	-8.73
Germanium	E	30632	27958	-8.73
Indium	A	2360023	2357680	-0.10
Bismuth	A	2266497	2267532	0.05
Yttrium	A	2432797	2409946	-0.94
Terbium	A	3473572	3490349	0.48

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750037.1 File : 09d14q00037 Time : 14-APR-2009 23:13
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11777, S11768

Analyte	Ch	Quant	IQL	Units	Flags
Cadmium	A	1.807	0.1000	ug/L	!a+
Lead	A	0.8738	0.1000	ug/L	!a+
Silver	A	0.2086	0.1000	ug/L	!a+
Arsenic	E	0.2751	0.1000	ug/L	!a+
Chromium	E	1.632	0.1000	ug/L	!a+
Copper	E	3.352	0.1000	ug/L	!a+
Nickel	E	2.624	0.1000	ug/L	!a+
Zinc	E	3.545	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93450	ug/L	93
Calcium	A	300000	301800	ug/L	101
Magnesium	A	100000	90510	ug/L	91
Molybdenum	A	2000	2078	ug/L	104
Potassium	A	100000	96650	ug/L	97
Sodium	E	250000	245200	ug/L	98
Iron	H	250000	243100	ug/L	97

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1624811	-32.89
Scandium	A	2046299	1749080	-14.52
Scandium	E	49035	47750	-2.62
Scandium	H	751226	679157	-9.59
Germanium	H	154860	128478	-17.04
Germanium	E	30632	27885	-8.97
Indium	A	2360023	2105409	-10.79
Bismuth	A	2266497	1849457	-18.40
Yttrium	A	2432797	2280403	-6.26
Terbium	A	3473572	3397553	-2.19

!=warning +=high bias a=ICSA

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899150750037.1

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
 Seqnum : 899150750038.1 File : 09d14q00038 Time : 14-APR-2009 23:24
 Cal : 899150750001 Caldate : 14-APR-2009
 Standards: S11778, S11768

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Cadmium	A	100.0	101.8	ug/L	2	20	
Silver	A	50.00	49.03	ug/L	-2	20	
Arsenic	E	100.0	103.9	ug/L	4	20	
Chromium	E	200.0	201.7	ug/L	1	20	
Copper	E	200.0	176.1	ug/L	-12	20	
Nickel	E	200.0	186.1	ug/L	-7	20	
Zinc	E	100.0	88.32	ug/L	-12	20	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	751226	626054	-16.66
Scandium	A	2046299	1647685	-19.48
Scandium	E	49035	43991	-10.29
Germanium	H	154860	119843	-22.61
Germanium	E	30632	26539	-13.36
Indium	A	2360023	2026925	-14.11
Yttrium	A	2432797	2210908	-9.12

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750085.1 File : 09d14q00085 Time : 15-APR-2009 08:14
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11777, S11768

Analyte	Ch	Quant	IQL	Units	Flags
Cadmium	A	2.175	0.1000	ug/L	!a+
Lead	A	0.8356	0.1000	ug/L	!a+
Silver	A	0.2167	0.1000	ug/L	!a+
Arsenic	E	0.2920	0.1000	ug/L	!a+
Chromium	E	1.561	0.1000	ug/L	!a+
Copper	E	3.276	0.1000	ug/L	!a+
Nickel	E	2.654	0.1000	ug/L	!a+
Zinc	E	3.575	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92560	ug/L	93
Calcium	A	300000	302200	ug/L	101
Magnesium	A	100000	88250	ug/L	88
Molybdenum	A	2000	2020	ug/L	101
Potassium	A	100000	99520	ug/L	100
Sodium	E	250000	234300	ug/L	94
Iron	H	250000	244600	ug/L	98

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	2135010	-11.81
Scandium	A	2046299	2072120	1.26
Scandium	E	49035	45858	-6.48
Scandium	H	751226	591546	-21.26
Germanium	H	154860	114202	-26.25
Germanium	E	30632	27381	-10.61
Indium	A	2360023	2294080	-2.79
Bismuth	A	2266497	1872045	-17.40
Yttrium	A	2432797	2607681	7.19
Terbium	A	3473572	3523854	1.45

!=warning +=high bias a=ICSA

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899150750085.1

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
 Seqnum : 899150750086.1 File : 09d14q00086 Time : 15-APR-2009 08:25
 Cal : 899150750001 Caldate : 14-APR-2009
 Standards: S11778, S11768

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Cadmium	A	100.0	101.8	ug/L	2	20		
Silver	A	50.00	49.78	ug/L	0	20		
Arsenic	E	100.0	102.4	ug/L	2	20		
Chromium	E	200.0	200.5	ug/L	0	20		
Copper	E	200.0	174.7	ug/L	-13	20		
Nickel	E	200.0	187.0	ug/L	-6	20		
Zinc	E	100.0	85.30	ug/L	-15	20		

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	751226	602485	-19.80
Scandium	A	2046299	2080890	1.69
Scandium	E	49035	44730	-8.78
Germanium	H	154860	117546	-24.10
Germanium	E	30632	27274	-10.96
Indium	A	2360023	2281324	-3.33
Yttrium	A	2432797	2615100	7.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750128 File : 09d14q00128 Time : 15-APR-2009 16:14
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11776, S11768

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Flags
Cadmium	A	0.0365	0.0353	100.0	100.2	ug/L	0	10		
Lead	A	0.3605	0.3121	100.0	102.9	ug/L	3	10		
Silver	A	0.1591	0.1484	100.0	92.58	ug/L	-7	10		
Arsenic	E	0.3039	0.2824	100.0	99.87	ug/L	0	10		
Chromium	E	3.0069	2.2012	100.0	107.8	ug/L	8	10		
Copper	E	5.8142	4.3478	100.0	98.41	ug/L	-2	10		
Nickel	E	1.0634	1.0616	100.0	112.8	ug/L	13	10	c+ ***	
Zinc	E	1.8498	0.5215	100.0	95.30	ug/L	-5	10		

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1686953	-30.32
Scandium	A	2046299	1803885	-11.85
Scandium	E	49035	34878	-28.87
Scandium	H	751226	508440	-32.32
Germanium	H	154860	108115	-30.19
Germanium	E	30632	23823	-22.23
Indium	A	2360023	2268532	-3.88
Bismuth	A	2266497	2165709	-4.45
Yttrium	A	2432797	2416771	-0.66
Terbium	A	3473572	3411484	-1.79

+=high bias c=CCV

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899150750128

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750130 File : 09d14q00130 Time : 15-APR-2009 16:37
Cal : 899150750001 Caldate : 14-APR-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Cadmium	A	ND	0.1000	0.02757	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Copper	E	ND	0.1000	0.08496	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1732804	-28.42
Scandium	A	2046299	1837956	-10.18
Scandium	E	49035	34949	-28.73
Scandium	H	751226	498894	-33.59
Germanium	H	154860	107449	-30.62
Germanium	E	30632	24243	-20.86
Indium	A	2360023	2388289	1.20
Bismuth	A	2266497	2269040	0.11
Yttrium	A	2432797	2479851	1.93
Terbium	A	3473572	3446768	-0.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750139 File : 09d14q00139 Time : 15-APR-2009 18:17
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11776, S11768

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Flags
Cadmium	A	0.0365	0.0350	100.0	99.40	ug/L	-1	10		
Lead	A	0.3605	0.3177	100.0	104.7	ug/L	5	10		
Silver	A	0.1591	0.1493	100.0	93.17	ug/L	-7	10		
Arsenic	E	0.3039	0.2826	100.0	99.96	ug/L	0	10		
Chromium	E	3.0069	2.1939	100.0	107.5	ug/L	8	10		
Copper	E	5.8142	4.3006	100.0	97.34	ug/L	-3	10		
Nickel	E	1.0634	1.0594	100.0	112.6	ug/L	13	10	c+ ***	
Zinc	E	1.8498	0.5181	100.0	94.69	ug/L	-5	10		

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1641388	-32.20
Scandium	A	2046299	1762720	-13.86
Scandium	E	49035	33544	-31.59
Scandium	H	751226	476381	-36.59
Germanium	H	154860	102965	-33.51
Germanium	E	30632	23129	-24.49
Indium	A	2360023	2238842	-5.13
Bismuth	A	2266497	2185080	-3.59
Yttrium	A	2432797	2405606	-1.12
Terbium	A	3473572	3334601	-4.00

+=high bias c=CCV

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750141 File : 09d14q00141 Time : 15-APR-2009 18:40
Cal : 899150750001 Caldate : 14-APR-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Cadmium	A	ND	0.1000	0.02757	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Copper	E	ND	0.1000	0.08496	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1587708	-34.42
Scandium	A	2046299	1719597	-15.97
Scandium	E	49035	33152	-32.39
Scandium	H	751226	464909	-38.11
Germanium	H	154860	101407	-34.52
Germanium	E	30632	23136	-24.47
Indium	A	2360023	2284412	-3.20
Bismuth	A	2266497	2236277	-1.33
Yttrium	A	2432797	2357256	-3.11
Terbium	A	3473572	3322496	-4.35

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899150750142 File : 09d14q00142 Time : 15-APR-2009 18:51
Cal : 899150750001 Caldate : 14-APR-2009
Standards: S11777, S11768

Analyte	Ch	Quant	IQL	Units	Flags
Cadmium	A	1.953	0.1000	ug/L	!a+
Lead	A	0.9309	0.1000	ug/L	!a+
Silver	A	0.2212	0.1000	ug/L	!a+
Arsenic	E	0.3056	0.1000	ug/L	!a+
Chromium	E	1.717	0.1000	ug/L	!a+
Copper	E	3.480	0.1000	ug/L	!a+
Nickel	E	2.911	0.1000	ug/L	!a+
Zinc	E	3.527	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	84790	ug/L	85
Calcium	A	300000	301200	ug/L	100
Magnesium	A	100000	81460	ug/L	81
Molybdenum	A	2000	2038	ug/L	102
Potassium	A	100000	96630	ug/L	97
Sodium	E	250000	239800	ug/L	96
Iron	H	250000	257500	ug/L	103

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2420938	1323968	-45.31
Scandium	A	2046299	1574323	-23.06
Scandium	E	49035	32522	-33.68
Scandium	H	751226	442081	-41.15
Germanium	H	154860	88744	-42.69
Germanium	E	30632	21320	-30.40
Indium	A	2360023	2007381	-14.94
Bismuth	A	2266497	1802324	-20.48
Yttrium	A	2432797	2228885	-8.38
Terbium	A	3473572	3167533	-8.81

!=warning +=high bias a=ICSA

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899150750142

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 211416 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
 Seqnum : 899150750143 File : 09d14q00143 Time : 15-APR-2009 19:03
 Cal : 899150750001 Caldate : 14-APR-2009
 Standards: S11778, S11768

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Cadmium	A	100.0	101.8	ug/L	2	20	
Silver	A	50.00	48.95	ug/L	-2	20	
Arsenic	E	100.0	104.7	ug/L	5	20	
Chromium	E	200.0	210.6	ug/L	5	20	
Copper	E	200.0	178.4	ug/L	-11	20	
Nickel	E	200.0	200.1	ug/L	0	20	
Zinc	E	100.0	86.77	ug/L	-13	20	

ISTD (ICALBLK 09d14q00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	751226	443323	-40.99
Scandium	A	2046299	1625752	-20.55
Scandium	E	49035	33278	-32.13
Germanium	H	154860	89177	-42.41
Germanium	E	30632	21608	-29.46
Indium	A	2360023	2013112	-14.70
Yttrium	A	2432797	2275229	-6.48

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69152165

Instrument : MET06
 Method : EPA 6020

Begun : 04/15/09 15:48
 SOP Version : icpm_s_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09d15p00001	TUN				04/15/09 15:48	1.0	1	
002	09d15p00002	X	RINSE			04/15/09 15:55	1.0	2	
003	09d15p00003	ICALBLK	CALBLANK			04/15/09 16:05	1.0	2	
004	09d15p00004	ICAL				04/15/09 16:11	1.0	3 2	
005	09d15p00005	ICAL				04/15/09 16:21	1.0	4 2	
006	09d15p00006	ICAL				04/15/09 16:32	1.0	5 2	
007	09d15p00007	ICAL				04/15/09 16:43	1.0	6 2	
008	09d15p00008	ICAL				04/15/09 16:55	1.0	7 2	
009	09d15p00009	ICAL				04/15/09 17:06	1.0	8 2	
010	09d15p00010	ICV				04/15/09 17:16	1.0	9 2	
011	09d15p00011	X				04/15/09 17:27	1.0	9 2	
012	09d15p00012	X				04/15/09 17:38	1.0	7 2	
013	09d15p00013	X				04/15/09 17:48	1.0	8 2	
014	09d15p00014	X				04/15/09 17:59	1.0	9 2	
015	09d15p00015	X				04/15/09 18:09	1.0	2	
016	09d15p00016	ICB				04/15/09 18:20	1.0	2	
017	09d15p00017	ICSA				04/15/09 18:31	1.0	10 2	7:CA=330000
018	09d15p00018	ICSAB				04/15/09 18:42	1.0	11 2	11:CA=310000
019	09d15p00019	X	RINSE			04/15/09 18:53	1.0	2	
020	09d15p00020	X	RINSE			04/15/09 19:03	1.0	2	
021	09d15p00021	?SAMPLE	210699-012		149940	04/15/09 19:14	5.0	2	
022	09d15p00022	SER	QC491498	Filtrate	149890	04/15/09 19:25	25.0	2	
023	09d15p00023	?SAMPLE	210699-012		149940	04/15/09 19:36	1.0	2	
024	09d15p00024	SAMPLE	211416-001	Water	149940	04/15/09 19:47	50.0	2	2:FE=22000
025	09d15p00025	SAMPLE	211416-002	Water	149940	04/15/09 19:58	50.0	2	1:MN=270
026	09d15p00026	CCV				04/15/09 20:08	1.0	12 2	
027	09d15p00027	X				04/15/09 20:19	1.0	12 2	
028	09d15p00028	X				04/15/09 20:30	1.0	12 2	
029	09d15p00029	CCB				04/15/09 20:40	1.0	2	
030	09d15p00030	X				04/15/09 20:51	1.0	2	
031	09d15p00031	BLANK	QC491599	Soil	149913	04/15/09 21:02	5.0	2	
032	09d15p00032	BS	QC491600	Soil	149913	04/15/09 21:13	10.0	2	
033	09d15p00033	BSD	QC491601	Soil	149913	04/15/09 21:24	10.0	2	
034	09d15p00034	MSS	211288-002	Soil	149913	04/15/09 21:35	50.0	2	
035	09d15p00035	MS	QC491602	Soil	149913	04/15/09 21:45	50.0	2	
036	09d15p00036	MSD	QC491603	Soil	149913	04/15/09 21:56	50.0	2	
037	09d15p00037	SER	QC491732	Soil	149913	04/15/09 22:07	250.0	2	
039	09d15p00039	SAMPLE	211288-001	Soil	149913	04/15/09 22:28	50.0	2	
040	09d15p00040	SAMPLE	211288-003	Soil	149913	04/15/09 22:39	50.0	2	
041	09d15p00041	CCV				04/15/09 22:50	1.0	12 2	
042	09d15p00042	CCB				04/15/09 23:01	1.0	2	
043	09d15p00043	X				04/15/09 23:12	1.0	2	
044	09d15p00044	SAMPLE	211288-007	Soil	149913	04/15/09 23:22	50.0	2	
045	09d15p00045	SAMPLE	211288-008	Soil	149913	04/15/09 23:33	50.0	2	
046	09d15p00046	SAMPLE	211288-009	Soil	149913	04/15/09 23:44	50.0	2	
047	09d15p00047	SAMPLE	211288-010	Soil	149913	04/15/09 23:55	50.0	2	
048	09d15p00048	SAMPLE	211288-011	Soil	149913	04/16/09 00:06	50.0	2	
049	09d15p00049	SAMPLE	211288-012	Soil	149913	04/16/09 00:16	50.0	2	
050	09d15p00050	SAMPLE	211288-013	Soil	149913	04/16/09 00:27	50.0	2	
051	09d15p00051	SAMPLE	211288-014	Soil	149913	04/16/09 00:38	50.0	2	
052	09d15p00052	SAMPLE	211288-015	Soil	149913	04/16/09 00:49	50.0	2	
053	09d15p00053	SAMPLE	211288-016	Soil	149913	04/16/09 01:00	50.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69152165

Instrument : MET06
 Method : EPA 6020

Begun : 04/15/09 15:48
 SOP Version : icpm_s_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
054	09d15p00054	CCV				04/16/09 01:11	1.0	12 2	
055	09d15p00055	CCB				04/16/09 01:21	1.0	2	
056	09d15p00056	X				04/16/09 01:32	1.0	2	
057	09d15p00057	SAMPLE	211288-017	Soil	149913	04/16/09 01:43	50.0	2	
058	09d15p00058	TUN				04/16/09 01:55	1.0	1	
059	09d15p00059	X	RINSE			04/16/09 02:01	1.0	2	
060	09d15p00060	SAMPLE	211288-018	Soil	149913	04/16/09 02:12	50.0	2	
061	09d15p00061	SAMPLE	211288-019	Soil	149913	04/16/09 02:23	50.0	2	
062	09d15p00062	SAMPLE	211173-005	Soil	149913	04/16/09 02:34	50.0	2	
063	09d15p00063	SAMPLE	211173-006	Soil	149913	04/16/09 02:45	50.0	2	
064	09d15p00064	SAMPLE	211173-007	Soil	149913	04/16/09 02:55	50.0	2	
065	09d15p00065	SAMPLE	211126-009	Soil	149722	04/16/09 03:06	50.0	2	
066	09d15p00066	CCV				04/16/09 03:17	1.0	12 2	
067	09d15p00067	X				04/16/09 03:28	1.0	2	
068	09d15p00068	CCB				04/16/09 03:39	1.0	2	
069	09d15p00069	ICSA				04/16/09 03:50	1.0	10 2	7:CA=430000
071	09d15p00071	ICSAB				04/16/09 04:11	1.0	11 2	12:CA=420000
072	09d15p00072	X	RINSE			04/16/09 04:22	1.0	2	
073	09d15p00073	X	RINSE			04/16/09 04:33	1.0	2	
074	09d15p00074	MSS	211097-005	Soil	149723	04/16/09 04:44	500.0	2	
075	09d15p00075	SER	QC491911	Soil	149723	04/16/09 04:54	250.0	2	
077	09d15p00077	SER	QC491911	Soil	149723	04/16/09 05:16	2500	2	
078	09d15p00078	PDS	QC491912	Soil	149723	04/16/09 05:27	500.0	13 14 2	
079	09d15p00079	MSS	211126-027	Soil	149723	04/16/09 05:38	500.0	2	
080	09d15p00080	SAMPLE	211097-001	Soil	149723	04/16/09 05:48	500.0	2	
081	09d15p00081	CCV				04/16/09 05:59	1.0	12 2	
082	09d15p00082	CCB				04/16/09 06:10	1.0	2	
083	09d15p00083	X				04/16/09 06:21	1.0	2	
084	09d15p00084	SAMPLE	211097-002	Soil	149723	04/16/09 06:31	500.0	2	1:CA=21000
085	09d15p00085	SAMPLE	211097-003	Soil	149723	04/16/09 06:42	500.0	2	
086	09d15p00086	SAMPLE	211097-004	Soil	149723	04/16/09 06:53	500.0	2	
087	09d15p00087	SAMPLE	211097-006	Soil	149723	04/16/09 07:04	500.0	2	
088	09d15p00088	MSS	211126-027	Soil	149723	04/16/09 07:15	50.0	2	
089	09d15p00089	MS	QC490827	Soil	149723	04/16/09 07:26	50.0	2	1:MN=310
090	09d15p00090	MSD	QC490828	Soil	149723	04/16/09 07:37	50.0	2	
091	09d15p00091	MSS	211097-005	Soil	149723	04/16/09 07:48	50.0	2	1:CA=150000
092	09d15p00092	MS	QC490829	Soil	149723	04/16/09 07:58	50.0	2	
093	09d15p00093	MSD	QC490830	Soil	149723	04/16/09 08:09	50.0	2	
094	09d15p00094	CCV				04/16/09 08:20	1.0	12 2	
095	09d15p00095	CCB				04/16/09 08:31	1.0	2	
096	09d15p00096	X				04/16/09 08:42	1.0	2	
097	09d15p00097	SAMPLE	211097-001	Soil	149723	04/16/09 08:53	50.0	2	1:CA=140000
098	09d15p00098	SAMPLE	211097-002	Soil	149723	04/16/09 09:04	50.0	2	1:CA=160000
099	09d15p00099	SAMPLE	211097-003	Soil	149723	04/16/09 09:14	50.0	2	1:CA=170000
100	09d15p00100	SAMPLE	211097-004	Soil	149723	04/16/09 09:25	50.0	2	1:CA=120000
101	09d15p00101	SAMPLE	211097-006	Soil	149723	04/16/09 09:32	50.0	2	1:CA=190000
102	09d15p00102	CCV				04/16/09 09:41	1.0	12 2	
103	09d15p00103	CCB				04/16/09 09:51	1.0	2	
104	09d15p00104	X				04/16/09 10:02	1.0	2	
105	09d15p00105	ICSA				04/16/09 10:13	1.0	10 2	4:FE=270000
106	09d15p00106	ICSAB				04/16/09 10:24	1.0	11 2	12:CA=310000
107	09d15p00107	X	RINSE			04/16/09 10:34	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69152165

Instrument : MET06 Begun : 04/15/09 15:48
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
108	09d15p00108	X	RINSE			04/16/09 10:45	1.0	2	
109	09d15p00109	X	RINSE			04/16/09 10:56	1.0	2	

JYF 04/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 106.

Standards used: 1=S11767 2=S11768 3=S11771 4=S11772 5=S11773 6=S11774 7=S11769 8=S11770 9=S11775 10=S11777 11=S11778
12=S11776 13=S10997 14=S10998

Page 3 of 3

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 69152165

Date : 04/15/09
 Sequence : MET06 09d15p00

Reference : 09d15p00003
 Analyzed : 04/15/09 16:05

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2636031	1964372	15021	282643	67225	9753	2668702	2246724	2699080	3572250
		LOWER LIMIT	790809	589312	4506	84793	20168	2926	800611	674017	809724	1071675
		UPPER LIMIT	3163237	2357246	18025	339172	80670	11704	3202442	2696069	3238896	4286700
016	ICB		2293065	1689638	15185	263058	64138	10231	2423816	2102987	2406256	3343279
017	ICSA		2175149	1646405	13378	251745	57427	8795	2417096	2090971	2391327	3352628
018	ICSAB		1993582	1560047	13146	253206	58014	8599	2299506	1995132	2258629	3207007
022	SER	QC491498	2247844	1621248	14809	247760	56411	9213	2325630	1944168	2303853	3171260
024	SAMPLE	211416-001	2054356	1558701	15029	274088	64476	10033	2297698	2017875	2279477	3195445
025	SAMPLE	211416-002	2146714	1637160	15161	271177	65025	10211	2384982	2088137	2384699	3301494
026	CCV		2084614	1601536	14771	260295	63248	10014	2361151	2059551	2327506	3243694
029	CCB		1999369	1529079	14831	253748	63038	10211	2312981	2028748	2264882	3192333
031	BLANK	QC491599	1927311	1462564	13893	247232	61776	9778	2254515	1993879	2190529	3172647
032	BS	QC491600	1905070	1474584	14464	246437	60301	9852	2246261	2000050	2220608	3163924
033	BSD	QC491601	1877461	1485498	14302	239038	58814	9831	2280874	2013535	2250456	3209542
034	MSS	211288-002	1904242	1453147	14692	233253	57792	10016	2260964	1966488	2214762	3141322
035	MS	QC491602	1876873	1437555	14641	234141	57862	10066	2234987	1952755	2214912	3131879
036	MSD	QC491603	1850861	1404546	14485	230794	57530	9931	2210685	1923418	2132812	3079116
037	SER	QC491732	1844715	1426399	14102	222322	56906	9938	2219548	1937705	2174434	3095109
039	SAMPLE	211288-001	1770535	1366470	13902	226254	56076	9534	2174048	1887812	2108989	3028457
040	SAMPLE	211288-003	1735174	1353418	13574	219303	55196	9403	2142841	1873420	2067808	3018532
041	CCV		1736869	1324536	13249	227714	56925	9342	2111458	1856386	2025214	2970579
042	CCB		1681547	1289547	13049	220641	55834	9185	2057273	1833716	1983330	2913700
044	SAMPLE	211288-007	1652501	1306852	13445	221629	55674	9304	2068709	1801681	1987581	2909325
045	SAMPLE	211288-008	1637791	1283671	13598	218555	54785	9434	2055980	1804191	1991059	2918833
046	SAMPLE	211288-009	1616087	1276011	13433	213671	53890	9372	2042822	1781036	1982985	2878820
047	SAMPLE	211288-010	1708859	1351947	13462	209979	53342	9238	2118900	1833986	2063972	2983016
048	SAMPLE	211288-011	1587355	1243915	12915	206140	52769	9145	1998816	1747148	1936800	2840680
049	SAMPLE	211288-012	1594777	1265123	13414	203866	51829	9391	2022607	1780359	1973014	2873575
050	SAMPLE	211288-013	1626882	1269511	12762	203772	51443	8968	2054537	1799650	1961846	2893792
051	SAMPLE	211288-014	1611094	1254520	12682	201456	51666	8941	2012066	1779908	1923174	2850581
052	SAMPLE	211288-015	1574372	1245569	13062	230748	57386	9108	2017762	1773066	1935369	2856874
053	SAMPLE	211288-016	1579938	1241715	12250	205049	52384	8767	2047262	1806262	1923264	2884902
054	CCV		1584064	1217096	12492	203643	51862	8780	1990698	1791597	1901099	2849052
055	CCB		1618612	1253082	12565	203618	52617	9042	1990473	1792286	1957014	2860395
057	SAMPLE	211288-017	1605851	1253953	12595	205684	52493	9096	2025112	1815430	1970136	2916999
060	SAMPLE	211288-018	1626995	1315029	12516	207507	52537	8771	2102967	1853912	2035558	2956589
061	SAMPLE	211288-019	1608530	1302598	12594	200692	51151	8782	2098948	1826012	2010287	2970136
062	SAMPLE	211173-005	1608704	1287076	12841	203154	52057	8918	2066461	1816347	2003711	2910009
063	SAMPLE	211173-006	1587028	1263125	12564	205562	52667	8858	2059042	1801646	1966495	2891599
064	SAMPLE	211173-007	1668013	1332527	12779	203880	52478	9040	2141572	1868327	2075742	3019068
065	SAMPLE	211126-009	1632751	1274114	13059	211006	53032	9226	2061184	1825488	1976496	2903662
066	CCV		1675276	1326392	12320	209742	53192	8656	2124275	1886848	2054484	3009429
068	CCB		1692361	1344852	12307	205536	53527	8914	2145128	1919812	2078320	3081814
069	ICSA		1655662	1347894	12351	220957	52502	8419	2160021	1907225	2089089	3092537
071	ICSAB		1508173	1289800	11799	234411	55019	8020	2113790	1866990	2018793	3043605
074	MSS	211097-005	1667641	1378691	13846	254422	62799	9827	2190413	1964155	2134789	3143903
075	SER	QC491911	1648528	1374716	13368	240976	60755	9407	2156786	1920184	2115787	3084089
077	SER	QC491911	1691649	1388871	13206	243656	61716	9486	2216484	1960712	2138857	3164147
078	PDS	QC491912	1725222	1436277	13354	247389	61031	9253	2257153	1996123	2195313	3206404
079	MSS	211126-027	1708169	1386561	13528	244785	61386	9531	2229033	1970741	2144553	3173635
080	SAMPLE	211097-001	1669642	1365050	13249	239097	59957	9393	2177903	1943393	2121920	3140165

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 69152165

Date : 04/15/09
 Sequence : MET06 09d15p00

Reference : 09d15p00003
 Analyzed : 04/15/09 16:05

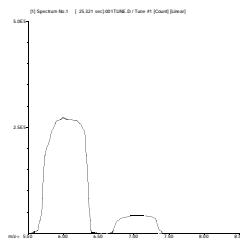
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
081	CCV		1706591	1369133	12835	241644	59977	9047	2206627	1964430	2139429	3142023
082	CCB		1717486	1417647	13087	238807	60518	9279	2220798	1976131	2171269	3175764
084	SAMPLE	211097-002	1713553	1389217	13279	229803	57942	9294	2235961	1968352	2149315	3205019
085	SAMPLE	211097-003	1695227	1387503	12975	225626	57080	9360	2209861	1956209	2144478	3154559
086	SAMPLE	211097-004	1699175	1392447	13029	221463	55773	9069	2213949	1965814	2156599	3133452
087	SAMPLE	211097-006	1651188	1346087	12821	218750	55104	9110	2164730	1939763	2090859	3096129
088	MSS	211126-027	1652773	1353360	12670	223962	55542	8818	2207086	1965929	2103869	3165247
089	MS	QC490827	1670891	1359277	12869	225271	55872	9146	2194809	1939782	2110915	3118446
090	MSD	QC490828	1668908	1383033	13183	211704	53684	9295	2216750	1960019	2130180	3185614
091	MSS	211097-005	1559159	1254917	12104	201214	50125	8376	2069813	1863723	1975965	2981508
092	MS	QC490829	1516675	1210715	11305	176839	45060	7794	2020270	1833158	1906276	2933579
093	MSD	QC490830	1499736	1185611	11076	179552	45240	7825	1995961	1818972	1874321	2919608
094	CCV		1725847	1390100	12142	187039	48018	8698	2235265	2008424	2157552	3215394
095	CCB		1762884	1391493	12826	194386	50994	9249	2240956	2004543	2168373	3226471
097	SAMPLE	211097-001	1468599	1195957	11672	176269	44959	8171	1980861	1824577	1886789	2917504
098	SAMPLE	211097-002	1504716	1206734	11275	170674	42904	7843	1987563	1841752	1901640	2928755
099	SAMPLE	211097-003	1378626	1075437	10681	156774	40695	7671	1849194	1701506	1726698	2706927
100	SAMPLE	211097-004	1360980	1067541	10194	149723	39108	7272	1814825	1695574	1700899	2668779
101	SAMPLE	211097-006	1274333	979507	9092	144456	37411	6616	1675147	1589594	1584181	2506410
102	CCV		1454566	1157107	10222	146743	38936	7371	1943304	1807858	1837999	2857918
103	CCB		1511106	1192273	11161	154254	41861	8205	1981084	1824938	1883440	2878804
105	ICSA		1505188	1210873	10600	155345	38807	7502	1994183	1819839	1906020	2897338
106	ICSB		1328351	1099668	10226	160256	39992	7362	1849149	1690287	1752281	2739980

MET06 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\09D15p00.B\001TUNE.D
Date Acquired: Apr 15 2009 03:48 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s11767
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\DATA\09D15p00.B\TN6020.M

RSD (%)

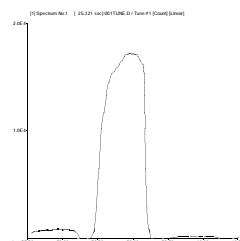
Element	Actual	Required	Flag
7 Li	1.45	5.00	
59 Co	1.82	5.00	
115 In	0.82	5.00	
205 Tl	0.27	5.00	

**7 Li****Mass Calib.**

Actual: 7.05
 Required: 6.90 - 7.10
 Flag:

Peak Width

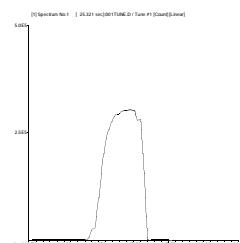
Actual: 0.60
 Required: 0.90
 Flag:

**59 Co****Mass Calib.**

Actual: 58.95
 Required: 58.90 - 59.10
 Flag:

Peak Width

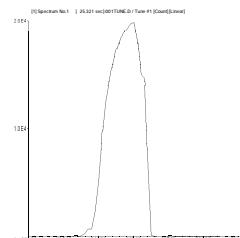
Actual: 0.60
 Required: 0.90
 Flag:

**115 In****Mass Calib.**

Actual: 114.90
 Required: 114.90 - 115.10
 Flag:

Peak Width

Actual: 0.60
 Required: 0.90
 Flag:

**205 Tl****Mass Calib.**

Actual: 204.95
 Required: 204.90 - 205.10
 Flag:

Peak Width

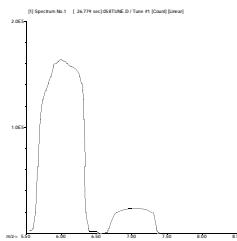
Actual: 0.65
 Required: 0.90
 Flag:

MET06 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\09D15p00.B\058TUNE.D
Date Acquired: Apr 16 2009 01:55 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s11767
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\DATA\09D15p00.B\TN6020.M

RSD (%)

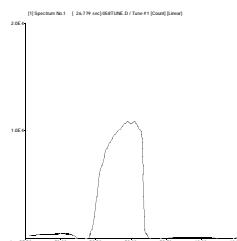
Element	Actual	Required	Flag
7 Li	2.50	5.00	
59 Co	1.59	5.00	
115 In	1.31	5.00	
205 Tl	1.08	5.00	

**7 Li****Mass Calib.**

Actual: 7.05
 Required: 6.90 - 7.10
 Flag:

Peak Width

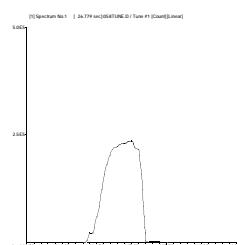
Actual: 0.60
 Required: 0.90
 Flag:

**59 Co****Mass Calib.**

Actual: 59.00
 Required: 58.90 - 59.10
 Flag:

Peak Width

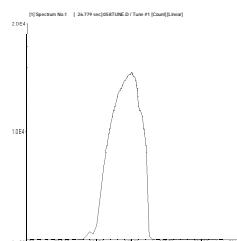
Actual: 0.60
 Required: 0.90
 Flag:

**115 In****Mass Calib.**

Actual: 114.90
 Required: 114.90 - 115.10
 Flag:

Peak Width

Actual: 0.60
 Required: 0.90
 Flag:

**205 Tl****Mass Calib.**

Actual: 204.95
 Required: 204.90 - 205.10
 Flag:

Peak Width

Actual: 0.65
 Required: 0.90
 Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 METALS Water: EPA 6020

Inst : MET06

Reviewer : ---

Calnum : 69152165001

Date : 15-APR-2009 16:05

Units : ug/L

X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09d15p00004	69152165004		15-APR-2009 16:11	S11771, S11768
L2	09d15p00005	69152165005		15-APR-2009 16:21	S11772, S11768
L3	09d15p00006	69152165006		15-APR-2009 16:32	S11773, S11768
L4	09d15p00007	69152165007		15-APR-2009 16:43	S11774, S11768
L5	09d15p00008	69152165008		15-APR-2009 16:55	S11769, S11768
L6	09d15p00009	69152165009		15-APR-2009 17:06	S11770, S11768

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	MnR^2	Flg
Cadmium	A	0.0197	0.0042	0.0017	4.0E-4	2.2E-4	2.4E-4	BLNK	-7.4435	4415.05		0.0044	0.996	0.995	
Lead	A	0.1576	0.0336	0.0165	0.0040	0.0019	0.0020	BLNK	-8.5605	537.964		0.0359	0.999	0.995	
Silver	A	0.0810	0.0183	0.0088	0.0020	9.4E-4	9.9E-4	BLNK	-7.8656	1067.41		0.0187	0.997	0.995	
Arsenic	E	0.4952	0.3711	0.3430	0.2836	0.2934	0.2961	BLNK	-0.0501	3.38453		0.3471	1.000	0.995	
Chromium	E	8.6412	2.8638	2.4828	2.1279	2.1389	2.1415	BLNK	-0.2301	0.46774		3.3994	1.000	0.995	
Copper	E	31.795	7.7617	5.9193	4.5976	4.4401	4.4306	BLNK	-0.6403	0.22648		9.8240	1.000	0.995	
Nickel	E	5.7875	1.2181	1.1446	1.0358	1.0446	1.0319	BLNK	-0.0823	0.96716		1.8771	1.000	0.995	
Zinc	E	10.985	3.3493	1.5478	0.6067	0.5449	0.5222	BLNK	-2.3070	1.92515		2.9259	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Cadmium	A	0.100	1141	0.500	281	1.000	-83	10.00	3	100.0	-11	200.0	3
Lead	A	0.100	-185	0.500	-5	1.000	-67	10.00	29	100.0	-6	200.0	1
Silver	A	0.100	678	0.500	276	1.000	49	10.00	37	100.0	-7	200.0	2
Arsenic	E	0.100	17	0.500	16	1.000	11	10.00	-5	100.0	-1	200.0	0
Chromium	E	0.100	74	0.500	-12	1.000	-7	10.00	-3	100.0	0	200.0	0
Copper	E	0.100	-20	0.500	-52	1.000	-30	10.00	-2	100.0	0	200.0	0
Nickel	E	0.100	377	0.500	1	1.000	2	10.00	-1	100.0	1	200.0	0
Zinc	E	0.100	-292	0.500	83	1.000	-33	10.00	-6	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

Page 1 of 1

69152165001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 METALS Water
EPA 6020

Inst : MET06
Calnum : 69152165001

Cal Date : 15-APR-2009

ICV 69152165010 (09d15p00010 15-APR-2009) stds: S11775, S11768

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Cadmium	A	0.0044	2.4E-4	100.0	97.13	ug/L	-3	10	
Lead	A	0.0359	0.0020	100.0	97.63	ug/L	-2	10	
Silver	A	0.0187	9.9E-4	100.0	97.43	ug/L	-3	10	
Arsenic	E	0.3471	0.2997	100.0	101.4	ug/L	1	10	
Chromium	E	3.3994	2.0922	100.0	97.63	ug/L	-2	10	
Copper	E	9.8240	4.4430	100.0	99.99	ug/L	0	10	
Nickel	E	1.8771	1.0314	100.0	99.67	ug/L	0	10	
Zinc	E	2.9259	0.5341	100.0	100.5	ug/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69152165016 File : 09d15p00016 Time : 15-APR-2009 18:20
Cal : 69152165001 Caldate : 15-APR-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Cadmium	A	3.181	0.1000	0.06044	ug/L	ib ***
Lead	A	1.916	0.1000	0.05505	ug/L	ib ***
Silver	A	1.186	0.1000	0.06124	ug/L	ib ***
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Copper	E	ND	0.1000	0.07274	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2636031	2293065	-13.01
Scandium	A	1964372	1689638	-13.99
Scandium	E	15021	15185	1.09
Scandium	H	282643	263058	-6.93
Germanium	H	67225	64138	-4.59
Germanium	E	9753	10231	4.90
Indium	A	2668702	2423816	-9.18
Bismuth	A	2246724	2102987	-6.40
Yttrium	A	2699080	2406256	-10.85
Terbium	A	3572250	3343279	-6.41

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69152165016

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69152165017 File : 09d15p00017 Time : 15-APR-2009 18:31
Cal : 69152165001 Caldate : 15-APR-2009
Standards: S11777, S11768

Analyte	Ch	Quant	IQL	Units	Flags
Cadmium	A	8.893	0.1000	ug/L	!a+
Lead	A	2.034	0.1000	ug/L	!a+
Silver	A	2.243	0.1000	ug/L	!a+
Arsenic	E	0.2799	0.1000	ug/L	!a+
Chromium	E	1.610	0.1000	ug/L	!a+
Copper	E	3.706	0.1000	ug/L	!a+
Nickel	E	2.800	0.1000	ug/L	!a+
Zinc	E	3.455	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	96490	ug/L	96
Calcium	A	300000	334800	ug/L	112
Magnesium	A	100000	98090	ug/L	98
Molybdenum	A	2000	1921	ug/L	96
Potassium	A	100000	97480	ug/L	97
Sodium	E	250000	249600	ug/L	100
Iron	H	250000	253300	ug/L	101

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2636031	2175149	-17.48
Scandium	A	1964372	1646405	-16.19
Scandium	E	15021	13378	-10.94
Scandium	H	282643	251745	-10.93
Germanium	H	67225	57427	-14.57
Germanium	E	9753	8795	-9.82
Indium	A	2668702	2417096	-9.43
Bismuth	A	2246724	2090971	-6.93
Yttrium	A	2699080	2391327	-11.40
Terbium	A	3572250	3352628	-6.15

!=warning +=high bias a=ICSA

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69152165017

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
 Seqnum : 69152165018 File : 09d15p00018 Time : 15-APR-2009 18:42
 Cal : 69152165001 Caldate : 15-APR-2009
 Standards: S11778, S11768

Analyte	Ch	Spiked	Quant	Units	%D	Max	%D	Flags
Cadmium	A	100.0	106.5	ug/L	7	20		
Silver	A	50.00	52.47	ug/L	5	20		
Arsenic	E	100.0	104.7	ug/L	5	20		
Chromium	E	200.0	208.6	ug/L	4	20		
Copper	E	200.0	192.0	ug/L	-4	20		
Nickel	E	200.0	196.2	ug/L	-2	20		
Zinc	E	100.0	100.5	ug/L	1	20		

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	282643	253206	-10.41
Scandium	A	1964372	1560047	-20.58
Scandium	E	15021	13146	-12.48
Germanium	H	67225	58014	-13.70
Germanium	E	9753	8599	-11.83
Indium	A	2668702	2299506	-13.83
Yttrium	A	2699080	2258629	-16.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69152165026 File : 09d15p00026 Time : 15-APR-2009 20:08
Cal : 69152165001 Caldate : 15-APR-2009
Standards: S11776, S11768

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Cadmium	A	0.0044	2.6E-4	100.0	105.3	ug/L	5	10	
Lead	A	0.0359	0.0021	100.0	106.8	ug/L	7	10	
Silver	A	0.0187	0.0011	100.0	107.5	ug/L	8	10	
Arsenic	E	0.3471	0.2902	100.0	98.17	ug/L	-2	10	
Chromium	E	3.3994	2.0684	100.0	96.52	ug/L	-3	10	
Copper	E	9.8240	4.2437	100.0	95.47	ug/L	-5	10	
Nickel	E	1.8771	1.0339	100.0	99.91	ug/L	0	10	
Zinc	E	2.9259	0.5150	100.0	96.83	ug/L	-3	10	

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2636031	2084614	-20.92
Scandium	A	1964372	1601536	-18.47
Scandium	E	15021	14771	-1.66
Scandium	H	282643	260295	-7.91
Germanium	H	67225	63248	-5.92
Germanium	E	9753	10014	2.68
Indium	A	2668702	2361151	-11.52
Bismuth	A	2246724	2059551	-8.33
Yttrium	A	2699080	2327506	-13.77
Terbium	A	3572250	3243694	-9.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69152165029 File : 09d15p00029 Time : 15-APR-2009 20:40
Cal : 69152165001 Caldate : 15-APR-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Cadmium	A	4.821	0.1000	0.06044	ug/L	ib ***
Lead	A	4.196	0.1000	0.05505	ug/L	ib ***
Silver	A	3.233	0.1000	0.06124	ug/L	ib ***
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Copper	E	ND	0.1000	0.07274	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2636031	1999369	-24.15
Scandium	A	1964372	1529079	-22.16
Scandium	E	15021	14831	-1.26
Scandium	H	282643	253748	-10.22
Germanium	H	67225	63038	-6.23
Germanium	E	9753	10211	4.70
Indium	A	2668702	2312981	-13.33
Bismuth	A	2246724	2028748	-9.70
Yttrium	A	2699080	2264882	-16.09
Terbium	A	3572250	3192333	-10.64

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69152165069 File : 09d15p00069 Time : 16-APR-2009 03:50
Cal : 69152165001 Caldate : 15-APR-2009
Standards: S11777, S11768

Analyte	Ch	Quant	IQL	Units	Flags
Cadmium	A	7.753	0.1000	ug/L	!a+
Lead	A	2.543	0.1000	ug/L	!a+
Silver	A	1.986	0.1000	ug/L	!a+
Arsenic	E	0.2229	0.1000	ug/L	!a+
Chromium	E	1.565	0.1000	ug/L	!a+
Copper	E	3.681	0.1000	ug/L	!a+
Nickel	E	2.843	0.1000	ug/L	!a+
Zinc	E	3.353	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	125700	ug/L	126
Calcium	A	300000	429300	ug/L	143
Magnesium	A	100000	122800	ug/L	123
Molybdenum	A	2000	2598	ug/L	130
Potassium	A	100000	126700	ug/L	127
Sodium	E	250000	230300	ug/L	92
Iron	H	250000	254300	ug/L	102

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2636031	1655662	-37.19
Scandium	A	1964372	1347894	-31.38
Scandium	E	15021	12351	-17.78
Scandium	H	282643	220957	-21.82
Germanium	H	67225	52502	-21.90
Germanium	E	9753	8419	-13.68
Indium	A	2668702	2160021	-19.06
Bismuth	A	2246724	1907225	-15.11
Yttrium	A	2699080	2089089	-22.60
Terbium	A	3572250	3092537	-13.43

!=warning +=high bias a=ICSA

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69152165069

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 211416 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
 Seqnum : 69152165071 File : 09d15p00071 Time : 16-APR-2009 04:11
 Cal : 69152165001 Caldate : 15-APR-2009
 Standards: S11778, S11768

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Cadmium	A	100.0	127.8	ug/L	28	20	ab+ ***
Silver	A	50.00	69.99	ug/L	40	20	ab+ ***
Arsenic	E	100.0	100.9	ug/L	1	20	
Chromium	E	200.0	210.6	ug/L	5	20	
Copper	E	200.0	189.7	ug/L	-5	20	
Nickel	E	200.0	200.4	ug/L	0	20	
Zinc	E	100.0	97.93	ug/L	-2	20	

ISTD (ICALBLK 09d15p00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	282643	234411	-17.06
Scandium	A	1964372	1289800	-34.34
Scandium	E	15021	11799	-21.45
Germanium	H	67225	55019	-18.16
Germanium	E	9753	8020	-17.77
Indium	A	2668702	2113790	-20.79
Yttrium	A	2699080	2018793	-25.20

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69152165071

SAMPLE PREPARATION SUMMARY

Batch # : 149940
 Started By : KDG
 Method : 200.8
 Spike #1 ID : S10511

Prep Date : 14-APR-2009 11:00
 Spike #2 ID : S10512

Analysis : ICAP
 Finished By : KDG
 Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
210560-001		Water	50	50	1	1.0						AG-200, CD-200, CR-200, CU-200, HARDNESS, NI-200, PB-200, ZN-200	
210699-001		Water	50	50	1	1.0						CA, HARDNESS, MG	
211087-003		Filtrate	50	50	1	1.0						TAL/ICP	
211087-004		Filtrate	50	50	1	1.0						TAL/ICP	
211087-005		Filtrate	50	50	1	1.0						TAL/ICP	added on 4/15
211328-001		Water	50	50	1	1.0						AS, FE, MN	
211328-003		Water	50	50	1	1.0						AS, FE, MN	
211416-001		Water	50	50	1	1.0						AG, AS, CD, CR, CU, NI, PB, ZN	added on 4/15
211416-002		Water	50	50	1	1.0						AG, AS, CD, CR, CU, NI, PB, ZN	added on 4/15
QC491709	BLANK	Water	50	50	1	1.0							
QC491710	BS	Water	50	50	1	1.0	.25	.25					
QC491711	BSD	Water	50	50	1	1.0	.25	.25					
QC491712	MS	Water	50	50	1	1.0	.25	.25					
QC491713	MSD	Water	50	50	1	1.0	.25	.25					
QC491714	SER	Water	50	50	1	1.0							
QC491715	PDS	Water	50	50	1	1.0							

Reviewed by: JYF Date: 04/15/09

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Water Digestion for ICP-MS

MS Batch #: 149940
Digested by: MLA
Re Digested: MLA

Digestion Method
 EPA 200.8 for ICP-MS
 EPA 3005A for ICP-MS

BK 2852

Digestion tubes, lot #
· .25 mL of spike solution (Std1) was added to all spikes
· .25 mL of spike solution (Std2) was added to all spikes
digestion temperature (90-95 degrees C)

digestion begun at (time)

concentrated HCl

concentrated HNO₃

digestion ended at (time)

filtered thru Whatman # 541

Relinquished to ICP group

www.ijerpi.org

Reagent ID or LIMS #	Initials / Date
578055-2601	feld 4/14
510511	
310512	
95	
11:00	
G4805D	
G4705L	
13:00	
N/A	✓

Prep Chemist / Date

Continued from page
Continued on page

~~1368~~
~~2637~~

Reviewed by / Date

152

MS Batch #: 149940
Digested by: TA
Digested: 4/15/09

Digestion Method
 EPA 200.8 for ICP-MS
 EPA 3005A for ICP-MS

BK 2852

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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
140	211087-005	D	50	50	N added to batch 148940
	211416 -001 -002	I	↓	↓	
7	210699 -001	L	↓	↓	

3 / Date

11509

NA mL of spike solution (Std1) was added to all spikes
NA mL of spike solution (Std2) was added to all spikes
digestion temperature (90-95 degrees C)
digestion begun at (time)
concentrated HCl
concentrated HNO₃
digestion ended at (time)
 filtered thru Whatman # 541
Relinquished to ICP group

Reagent ID or LIMS #	Initials	Date
578055-261	MM	1/14/16/09
NA		
NA		
95		
11:00am		
G81040		
H02028		
3:00pm		
NA		
MS		

v / Date

Prep Chemist / Beta

4 | 15 | 09

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Continued on page 11

Reviewed by / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 849154865

Instrument : MET14
 Method : EPA 7470A

Begun : 04/17/09 13:05
 SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	150066	X	STD01REP1			04/17/09 13:05	1.0	
002	150066	X	STD02REP1			04/17/09 13:08	1.0	
003	150066	ICALBLK	STD01REP1			04/17/09 13:11	1.0	
004	150066	ICAL	STD02REP1			04/17/09 13:13	1.0	1
005	150066	ICAL	STD03REP1			04/17/09 13:15	1.0	1
006	150066	ICAL	STD04REP1			04/17/09 13:18	1.0	1
007	150066	ICAL	STD05REP1			04/17/09 13:20	1.0	1
008	150066	ICAL	STD06REP1			04/17/09 13:23	1.0	1
009	150066	ICV				04/17/09 13:25	1.0	2
010	150066	ICB				04/17/09 13:27	1.0	
011	150066	BLANK	QC492198	Filtrate	150066	04/17/09 13:30	1.0	
012	150066	X	QC492199	Filtrate	150066	04/17/09 13:33	1.0	
013	150066	BS	QC492199	Filtrate	150066	04/17/09 13:50	1.0	
014	150066	BSD	QC492200	Filtrate	150066	04/17/09 13:52	1.0	
015	150066	MSS	211452-001	Filtrate	150066	04/17/09 13:55	1.0	
016	150066	SER	QC492203	Filtrate	150066	04/17/09 13:58	5.0	
017	150066	MS	QC492201	Filtrate	150066	04/17/09 14:00	1.0	
018	150066	MSD	QC492202	Filtrate	150066	04/17/09 14:02	1.0	
019	150066	BLANK	QC492204	WET Leachate	150066	04/17/09 14:04	1.0	
020	150066	MSS	211241-001	WET Leachate	150066	04/17/09 14:06	1.0	
021	150066	MS	QC492205	WET Leachate	150066	04/17/09 14:08	1.0	
022	150066	CCV				04/17/09 14:11	1.0	3
023	150066	CCB				04/17/09 14:13	1.0	
024	150066	MSD	QC492206	WET Leachate	150066	04/17/09 14:15	1.0	
025	150066	BLANK	QC492207	TCLP Leachate	150066	04/17/09 14:17	1.0	
026	150066	MSS	211278-001	TCLP Leachate	150066	04/17/09 14:19	1.0	
027	150066	MS	QC492208	TCLP Leachate	150066	04/17/09 14:22	1.0	
028	150066	MSD	QC492209	TCLP Leachate	150066	04/17/09 14:24	1.0	
029	150066	SAMPLE	211241-002	WET Leachate	150066	04/17/09 14:26	1.0	
030	150066	SAMPLE	211241-003	WET Leachate	150066	04/17/09 14:28	1.0	
031	150066	SAMPLE	211241-004	WET Leachate	150066	04/17/09 14:30	1.0	
032	150066	SAMPLE	211278-001	WET Leachate	150066	04/17/09 14:32	1.0	
033	150066	SAMPLE	211278-002	WET Leachate	150066	04/17/09 14:35	1.0	
034	150066	CCV				04/17/09 14:37	1.0	3
035	150066	CCB				04/17/09 14:39	1.0	
036	150066	SAMPLE	211278-003	WET Leachate	150066	04/17/09 14:41	1.0	
037	150066	SAMPLE	211278-002	TCLP Leachate	150066	04/17/09 14:43	1.0	
038	150066	SAMPLE	211278-003	TCLP Leachate	150066	04/17/09 14:46	1.0	
039	150066	SAMPLE	211413-001	Filtrate	150066	04/17/09 14:49	1.0	
040	150066	SAMPLE	211413-002	Filtrate	150066	04/17/09 14:52	1.0	
041	150066	SAMPLE	211473-003	Filtrate	150066	04/17/09 14:54	1.0	
042	150066	SAMPLE	211473-010	Filtrate	150066	04/17/09 14:56	1.0	
043	150066	CCV				04/17/09 14:58	1.0	3
044	150066	CCB				04/17/09 15:00	1.0	
045	150066	BLANK	QC492222	Water	150071	04/17/09 15:02	1.0	
046	150066	BS	QC492223	Water	150071	04/17/09 15:04	1.0	
047	150066	BSD	QC492224	Water	150071	04/17/09 15:07	1.0	
048	150066	MSS	211260-002	Water	150071	04/17/09 15:09	1.0	
049	150066	SER	QC492227	Water	150071	04/17/09 15:11	5.0	
050	150066	MS	QC492225	Water	150071	04/17/09 15:13	1.0	
051	150066	MSD	QC492226	Water	150071	04/17/09 15:16	1.0	
052	150066	SAMPLE	211272-001	Water	150071	04/17/09 15:18	1.0	1 : HG=11

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 849154865

Instrument : MET14
 Method : EPA 7470A

Begun : 04/17/09 13:05
 SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
053	150066	SAMPLE	211272-002	Water	150071	04/17/09 15:20	1.0	
054	150066	SAMPLE	211272-003	Water	150071	04/17/09 15:23	1.0	
055	150066	CCV				04/17/09 15:25	1.0	3
056	150066	CCB				04/17/09 15:27	1.0	
057	150066	SAMPLE	211272-004	Water	150071	04/17/09 15:29	1.0	
058	150066	SAMPLE	211272-005	Water	150071	04/17/09 15:31	1.0	
059	150066	SAMPLE	211275-001	Water	150071	04/17/09 15:33	1.0	
060	150066	SAMPLE	211304-001	Water	150071	04/17/09 15:36	1.0	
061	150066	SAMPLE	211304-005	Water	150071	04/17/09 15:38	1.0	
062	150066	SAMPLE	211416-001	Water	150071	04/17/09 15:41	1.0	
063	150066	SAMPLE	211416-002	Water	150071	04/17/09 15:43	1.0	
064	150066	SAMPLE	211453-001	Water	150071	04/17/09 15:45	1.0	
065	150066	SAMPLE	211470-003	Water	150071	04/17/09 15:47	1.0	
066	150066	SAMPLE	211470-004	Water	150071	04/17/09 15:50	1.0	
067	150066	CCV				04/17/09 15:52	1.0	3
068	150066	CCB				04/17/09 15:54	1.0	
069	150066	SAMPLE	211470-008	Water	150071	04/17/09 15:56	1.0	
070	150066	SAMPLE	211470-010	Water	150071	04/17/09 15:59	1.0	
071	150066	SAMPLE	211470-011	Water	150071	04/17/09 16:01	1.0	
072	150066	SAMPLE	211470-012	Water	150071	04/17/09 16:03	1.0	
073	150066	SAMPLE	211470-016	Water	150071	04/17/09 16:05	1.0	
074	150066	SAMPLE	211272-001	Water	150071	04/17/09 16:07	2.0	
075	150066	CCV				04/17/09 16:10	1.0	3
076	150066	CCB				04/17/09 16:12	1.0	

RFW 04/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 44.

RFW 04/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 45 through 76.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 METALS Water: EPA 7470A

Inst : MET14
 Calnum : 849154865002
 Units : ug/L

Date : 17-APR-2009 13:11
 X Axis : R

Reviewer : ---
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	150066	849154865004	STD02REP1	17-APR-2009 13:13	S11881 (500X)
L2	150066	849154865005	STD03REP1	17-APR-2009 13:15	S11881 (200X)
L3	150066	849154865006	STD04REP1	17-APR-2009 13:18	S11881 (50X)
L4	150066	849154865007	STD05REP1	17-APR-2009 13:20	S11881 (20X)
L5	150066	849154865008	STD06REP1	17-APR-2009 13:23	S11881 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	Flg
Mercury	2775.0	2516.0	2393.0	2289.4	2280.2	LINR	-0.0590	4.41E-4		2450.7	1.000	.99		

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-7	0.500	-1	2.000	3	5.000	0	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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849154865002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 METALS Water
EPA 7470A

Inst : MET14
Calnum : 849154865002 Cal Date : 17-APR-2009 Type : WATER

ICV 849154865009 (17-APR-2009) stds: S11883

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Mercury	2450.7	2320.0	5.000	5.060	ug/L	1	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849154865043.1 File : 150066 Time : 17-APR-2009 14:58
Cal : 849154865002 Caldate : 17-APR-2009 Caltyp : WATER
Standards: S11884

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2450.7	2380.6	5.000	5.190	ug/L	4	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849154865044.1 File : 150066 Time : 17-APR-2009 15:00
Cal : 849154865002 Caldate : 17-APR-2009 Caltyp : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849154865055 File : 150066 Time : 17-APR-2009 15:25
Cal : 849154865002 Caldate : 17-APR-2009 Caltyp : WATER
Standards: S11884

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2450.7	2377.4	5.000	5.180	ug/L	4	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849154865056 File : 150066 Time : 17-APR-2009 15:27
Cal : 849154865002 Caldate : 17-APR-2009 Caltyppe : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849154865067 File : 150066 Time : 17-APR-2009 15:52
Cal : 849154865002 Caldate : 17-APR-2009 Caltyp : WATER
Standards: S11884

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2450.7	2384.4	5.000	5.200	ug/L	4	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849154865068 File : 150066 Time : 17-APR-2009 15:54
Cal : 849154865002 Caldate : 17-APR-2009 Caltyppe : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 150071 Analysis : HG-200
 Started By : RFW Prep Date : 17-APR-2009 09:45 Finished By : RFW
 Method : METHOD Units : mL
 Spike #1 ID : S11881

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
211260-002		Water	50	50	1	1.0						HG	mss
211272-001		Water	50	50	1	1.0						HG	
211272-002		Water	50	50	1	1.0						HG	
211272-003		Water	50	50	1	1.0						HG	
211272-004		Water	50	50	1	1.0						HG	
211272-005		Water	50	50	1	1.0						HG	
211275-001		Water	50	50	1	1.0						HG	
211304-001		Water	50	50	1	1.0						HG-200	
211304-005		Water	50	50	1	1.0						HG-200	
211416-001		Water	50	50	1	1.0						HG	
211416-002		Water	50	50	1	1.0						HG	
211453-001		Water	50	50	1	1.0						HG	
211470-003		Water	50	50	1	1.0						HG-200	
211470-004		Water	50	50	1	1.0						HG-200	
211470-008		Water	50	50	1	1.0						HG-200	
211470-010		Water	50	50	1	1.0						HG-200	
211470-011		Water	50	50	1	1.0						HG-200	
211470-012		Water	50	50	1	1.0						HG-200	
211470-016		Water	50	50	1	1.0						HG-200	
QC492222	BLANK	Water	50	50	1	1.0							
QC492223	BS	Water	50	50	1	1.0		2.5					
QC492224	BSD	Water	50	50	1	1.0		2.5					
QC492225	MS	Water	50	50	1	1.0		2.5					
QC492226	MSD	Water	50	50	1	1.0		2.5					
QC492227	SER	Water	50	50	1	1.0							

Reviewed by: RFW Date: 04/17/09

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Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 150071
Date Digested: 4/17/09Digestion Method
 EPA 7470A/ EPA 245.1

BK2866

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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
211260-002	A	50	50	N	MSS
211272-001	B				
2					
3					
4					
5	V				
211275-001	A				
211304-001	A				
5	A				
211416-001	S				
2	S				
211453-001	S				
211470-003	A				
4					
8					
10					
11					
12	V				
16	D				
MB QC 492222					
BS	3				
BS	4				
MS	5			V	211260-002
MSD	6			V	

Reagent ID/ LIMS# / Time Initials / Date

Digestion Tube Lot #

CN090113 RPM 4/17/09

2.5 mL of spike solution was added to all spikes

ICAL Source LIMS S#

S11881

ICV / CCV LIMS S#

S11882

Digestion Temperature (degrees C)

S11883 S11884

Digestion Started at (time)

95concentrated H₂SO₄0945concentrated HNO₃G350265% KMnO₄G470345% K₂S₂O₈041509

NaCl.hydroxylamine hydrochloride

033109

Stannous Chloride

033109

Digestion Completed at (time)

041609 filtered thru' 0.45 um syringe filter (lot #)1145

Prep Chemist / Date

4/17/09

Continued from page

Continued on page

Reviewed by / Date

RPM 4/17/09

Laboratory Job Number 211416

ANALYTICAL REPORT

Ion Chromatography

Matrix: Water

Chloride

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 300.0
Matrix:	Water	Batch#:	149949
Units:	mg/L	Received:	04/14/09

Field ID: E027 Diln Fac: 10.00
 Type: SAMPLE Sampled: 04/14/09 10:00
 Lab ID: 211416-001 Analyzed: 04/14/09 16:05

Analyte	Result	RL
Chloride	120	2.0

Field ID: E026 Diln Fac: 10.00
 Type: SAMPLE Sampled: 04/14/09 11:30
 Lab ID: 211416-002 Analyzed: 04/14/09 16:23

Analyte	Result	RL
Chloride	75	2.0

Type: BLANK Diln Fac: 1.000
 Lab ID: QC491754 Analyzed: 04/14/09 08:49

Analyte	Result	RL
Chloride	ND	0.20

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Chloride

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 300.0
Field ID:	E027	Batch#:	149949
MSS Lab ID:	211416-001	Sampled:	04/14/09 10:00
Matrix:	Water	Received:	04/14/09
Units:	mg/L		

Type: BS Diln Fac: 1.000
 Lab ID: QC491755 Analyzed: 04/14/09 09:06

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.049	101	90-110

Type: BSD Diln Fac: 1.000
 Lab ID: QC491756 Analyzed: 04/14/09 09:24

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Chloride	4.000	4.055	101	90-110	0 20

Type: MS Diln Fac: 10.00
 Lab ID: QC491757 Analyzed: 04/14/09 16:40

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	115.4	20.00	135.1	99 NM	80-120

Type: MSD Diln Fac: 10.00
 Lab ID: QC491758 Analyzed: 04/14/09 16:57

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Chloride	20.00	134.2	94 NM	80-120	1 25

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 211416 IC Water: EPA 300.0

Inst : IC03

Name : IC03 CAL 099

Calnum : 629143116001

Date : 09-APR-2009 10:08

Units : mg/L

X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	099_10	629143116010	L1	09-APR-2009 10:08	S11105 (500X)
L2	099_11	629143116011	L2	09-APR-2009 10:26	S11105 (250X)
L3	099_12	629143116012	L3	09-APR-2009 10:43	S11105 (100X)
L4	099_13	629143116013	L4	09-APR-2009 11:00	S11105 (25X)
L5	099_14	629143116014	L5	09-APR-2009 11:18	S11105 (10X)
L6	099_15	629143116015	L6	09-APR-2009 11:35	S11105 (5X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	%RSD	MnR^2	Flg
Chloride	0.1403	0.1481	0.1386	0.1425	0.1500	0.1625	QORG		0.13753	0.001249	0.1470	1.000	0.990		

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Chloride	0.200	2	0.400	7	1.000	0	4.000	0	10.00	0	20.00	0

MJB 04/10/09 : ICAL points integrated to match previous ICAL's. ICV does not pass 9056 requirement for NO2. ICAL Ok for non-9056 samples. See CAR #4903 concerning Br and the ICB. Samples will be monitored carefully for Br carryover and will be re-run if needed. Carryover after the high point is atypical.

ATL 04/13/09 : I peer reviewed this ICAL.

Analyst: MJB

Date: 04/10/09

Reviewer: EAH

Date: 04/14/09

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

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629143116001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 211416 IC Water
EPA 300.0

Inst : IC03 Name : IC03 CAL 099
Calnum : 629143116001 Cal Date : 09-APR-2009

ICV 629143116019 (099_19 09-APR-2009) stds: S10785 (25X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloride	0.1470	0.1425	2.000	2.035	mg/L	2	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 IC Water
EPA 300.0

Inst : IC03 Run Name : L IDF : 1.0
Seqnum : 629150186010 File : 104_10 Time : 14-APR-2009 08:09
Cal : 629143116001 Caldate : 09-APR-2009
Standards: S11105 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chloride	0.1470	0.1348	1.000	0.9714	mg/L	-3	10	

MJB 04/14/09 : Integrated to match integration of ICAL and CCV .

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 211416 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629150186018 File : 104_18 Time : 14-APR-2009 17:15
Cal : 629143116001 Caldate : 09-APR-2009
Standards: S11105 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chloride	0.1470	0.1427	4.000	4.005	mg/L	0	10	

JLM 04/14/09 : Integrated to match integration of ICAL and CCV .

CURTIS & TOMPKINS BLANK USER REPORT FOR 211416 IC Water
EPA 300.0

Inst : IC03 Run Name : QC491754 IDF : 1.0
Seqnum : 629150186011.1 File : 104_11 Time : 14-APR-2009 08:49

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Chloride	629143116001	09-APR-2009	ND	0.2000	0.02734	mg/L	u

MJB: 04/16/09 ATL: 04/20/09 CP: 04/21/09

u=use

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629150186011.1

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 211416 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629150186019 File : 104_19 Time : 14-APR-2009 17:32

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Chloride	629143116001	09-APR-2009	ND	0.2000	0.02734	mg/L	

JLM: 04/14/09 ATL: 04/20/09 CP: 04/21/09

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629150186019

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629143116

Instrument : IC03
 Method : EPA 300.0

Begun : 04/09/09 09:16
 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	099_7	X	BLK			04/09/09 09:16	1.0		
008	099_8	X	BLK			04/09/09 09:33	1.0		
009	099_9	IB	CALIB			04/09/09 09:51	1.0		
010	099_10	ICAL	L1			04/09/09 10:08	1.0	1	
011	099_11	ICAL	L2			04/09/09 10:26	1.0	1	
012	099_12	ICAL	L3			04/09/09 10:43	1.0	1	
013	099_13	ICAL	L4			04/09/09 11:00	1.0	1	
014	099_14	ICAL	L5			04/09/09 11:18	1.0	1	
015	099_15	ICAL	L6			04/09/09 11:35	1.0	1	
016	099_16	X	ICB			04/09/09 11:53	1.0		
017	099_17	ICB				04/09/09 12:33	1.0		
018	099_18	X	ICV			04/09/09 12:50	1.0	2	
019	099_19	ICV				04/09/09 13:08	1.0	3	
020	099_20	CCB/MB	QC491088	Water	149791	04/09/09 13:39	1.0		
021	099_21	BS	QC491089	Water	149791	04/09/09 13:57	1.0	1	
022	099_22	BSD	QC491090	Water	149791	04/09/09 14:14	1.0	1	
023	099_23	MSS	211289-017	Water	149791	04/09/09 14:43	1.0		1:CL=38
024	099_24	SAMPLE	211282-001	Water	149791	04/09/09 15:00	10.0		1:CL=22
025	099_25	SAMPLE	211281-001	Water	149791	04/09/09 15:17	2000		
026	099_26	SAMPLE	211281-002	Water	149791	04/09/09 15:35	1000		
027	099_27	SAMPLE	211282-005	Water	149791	04/09/09 15:52	20.0		
028	099_28	SAMPLE	211282-006	Water	149791	04/09/09 16:10	20.0		
029	099_29	SAMPLE	211282-001	Water	149791	04/09/09 16:27	1.0		2:CL=150
030	099_30	X	BLK		149791	04/09/09 16:45	1.0		
031	099_31	CCV	H		149791	04/09/09 17:02	1.0	1	
032	099_32	CCB			149791	04/09/09 17:19	1.0		
033	099_33	SAMPLE	211307-003	Water	149791	04/09/09 17:37	1.0		1:CL=31
034	099_34	SAMPLE	211308-001	Water	149791	04/09/09 17:54	100.0		
035	099_35	SAMPLE	211309-005	Water	149791	04/09/09 18:12	1.0		2:SO4=92
036	099_36	X	BLK		149791	04/09/09 18:29	1.0		
037	099_37	SAMPLE	211281-001	Water	149791	04/09/09 18:46	100.0		1:CL=200
038	099_38	X	BLK		149791	04/09/09 19:04	1.0		
039	099_39	X	BLK		149791	04/09/09 19:21	1.0		
040	099_40	SAMPLE	211281-002	Water	149791	04/09/09 19:39	50.0		2:CL=210
041	099_41	X	BLK		149791	04/09/09 19:56	1.0		
042	099_42	X	BLK		149791	04/09/09 20:13	1.0		
043	099_43	SAMPLE	211282-005	Water	149791	04/09/09 20:31	1.0		2:SO4=130
044	099_44	X	BLK		149791	04/09/09 20:48	1.0		
045	099_45	X	BLK		149791	04/09/09 21:06	1.0		
046	099_46	SAMPLE	211282-006	Water	149791	04/09/09 21:23	1.0		2:CL=130
047	099_47	X	BLK		149791	04/09/09 21:40	1.0		
048	099_48	X	BLK		149791	04/09/09 21:58	1.0		
049	099_49	SAMPLE	211274-001	Water	149791	04/09/09 22:15	1.0		2:SO4=110
050	099_50	X	BLK		149791	04/09/09 22:33	1.0		
051	099_51	SAMPLE	211274-004	Water	149791	04/09/09 22:50	1.0		2:BR=65
052	099_52	X	BLK		149791	04/09/09 23:08	1.0		
053	099_53	SAMPLE	211274-005	Water	149791	04/09/09 23:25	1.0		2:CL=38
054	099_54	X	BLK		149791	04/09/09 23:42	1.0		
055	099_55	X	BLK		149791	04/10/09 00:00	1.0		
056	099_56	CCV	M		149791	04/10/09 00:17	1.0	1	
057	099_57	CCB			149791	04/10/09 00:35	1.0		
058	099_58	X	CCV		149791	04/10/09 00:52	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629143116

Instrument : IC03
 Method : EPA 300.0

Begun : 04/09/09 09:16
 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
059	099_59	X	CCB		149791	04/10/09 01:09	1.0		
060	099_60	SAMPLE	211289-002	Water	149791	04/10/09 01:27	1.0		
061	099_61	SAMPLE	211289-004	Water	149791	04/10/09 01:44	1.0		
062	099_62	SAMPLE	211289-006	Water	149791	04/10/09 02:02	1.0		
063	099_63	SAMPLE	211289-008	Water	149791	04/10/09 02:19	1.0		
064	099_64	SAMPLE	211289-010	Water	149791	04/10/09 02:36	1.0		
065	099_65	SAMPLE	211289-013	Water	149791	04/10/09 02:54	1.0		
066	099_66	SAMPLE	211289-015	Water	149791	04/10/09 03:11	1.0		1:CL=38
067	099_67	MSS	211289-017	Water	149791	04/10/09 03:29	5.0		
068	099_68	MS	QC491148	Water	149791	04/10/09 03:46	5.0	1	
069	099_69	MSD	QC491149	Water	149791	04/10/09 04:04	5.0	1	
070	099_70	CCV	H		149791	04/10/09 04:21	1.0	1	
071	099_71	CCB			149791	04/10/09 04:38	1.0		
072	099_72	X	CCV		149791	04/10/09 04:56	1.0	1	
073	099_73	X	CCB		149791	04/10/09 05:13	1.0		
074	099_74	SAMPLE	211308-001	Water	149791	04/10/09 05:31	2.0		2:CL=160
075	099_75	X	BLK		149791	04/10/09 05:48	1.0		
076	099_76	X	BLK		149791	04/10/09 06:05	1.0		
077	099_77	SAMPLE	211308-001	Water	149791	04/10/09 06:23	10.0		1:CL=45
078	099_78	X	BLK		149791	04/10/09 06:40	1.0		
079	099_79	SAMPLE	211281-002	Water	149791	04/10/09 06:58	100.0		1:CL=130
080	099_80	X	BLK		149791	04/10/09 07:15	1.0		
081	099_81	SAMPLE	211282-001	Water	149791	04/10/09 07:32	20.0		
082	099_82	SAMPLE	211282-005	Water	149791	04/10/09 07:50	5.0		1:CL=34
083	099_83	SAMPLE	211282-006	Water	149791	04/10/09 08:07	5.0		1:CL=34
084	099_84	SAMPLE	211274-001	Water	149791	04/10/09 08:25	5.0		
085	099_85	SAMPLE	211274-004	Water	149791	04/10/09 08:42	5.0		
086	099_86	SAMPLE	211274-005	Water	149791	04/10/09 09:00	5.0		
087	099_87	SAMPLE	211290-004	Water	149791	04/10/09 09:17	1.0		3:NO3N=96
088	099_88	X	BLK		149791	04/10/09 09:34	1.0		
089	099_89	X	BLK		149791	04/10/09 09:52	1.0		
090	099_90	CCV	M		149791	04/10/09 10:09	1.0	1	
091	099_91	CCB			149791	04/10/09 10:27	1.0		
092	099_92	SAMPLE	211290-004	Water	149791	04/10/09 10:44	20.0		1:NO3N=8.0
093	099_93	SAMPLE	211309-005	Water	149791	04/10/09 11:01	5.0		
094	099_94	CCV	H		149791	04/10/09 11:26	1.0	1	
095	099_95	CCB			149791	04/10/09 11:43	1.0		
096	099_96	BLANK	QC491292	Water	149836	04/10/09 12:06	1.0		
097	099_97	BS	QC491293	Water	149836	04/10/09 12:23	1.0	1	
098	099_98	BSD	QC491294	Water	149836	04/10/09 12:41	1.0	1	
099	099_99	MSS	211309-003	Water	149836	04/10/09 12:58	5.0		1:BR=28
100	099_100	X	211309-001		149836	04/10/09 13:16	1.0		
101	099_101	X	BLK		149836	04/10/09 13:33	1.0		
102	099_102	SAMPLE	211309-002	Water	149836	04/10/09 13:50	1.0		1:CL=110
103	099_103	X	BLK		149836	04/10/09 14:08	1.0		
104	099_104	SAMPLE	211309-004	Water	149836	04/10/09 14:25	1.0		1:CL=110
105	099_105	X	BLK		149836	04/10/09 14:43	1.0		
106	099_106	MSS	211309-003	Water	149836	04/10/09 15:04	1.0		2:BR=160
107	099_107	X	BLK		149836	04/10/09 15:22	1.0		
108	099_108	SAMPLE	211309-001	Water	149836	04/10/09 15:39	1.0		1:CL=200
109	099_109	X	BLK		149836	04/10/09 15:56	1.0		
110	099_110	MSS	211309-003	Water	149836	04/10/09 16:14	20.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629143116

Instrument : IC03
 Method : EPA 300.0

Begun : 04/09/09 09:16
 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
111	099_111	CCV	M		149836	04/10/09 16:31	1.0	1	
112	099_112	CCB			149836	04/10/09 16:49	1.0		
113	099_113	SAMPLE	211328-002	Water	149836	04/10/09 17:06	5.0		1:CL=23
114	099_114	SAMPLE	211328-004	Water	149836	04/10/09 17:23	1.0		1:CL=60
115	099_115	SAMPLE	211329-004	Water	149836	04/10/09 17:41	10.0		
116	099_116	SAMPLE	211329-006	Water	149836	04/10/09 17:58	10.0		
117	099_117	SAMPLE	211329-007	Water	149836	04/10/09 18:16	10.0		
118	099_118	SAMPLE	211329-008	Water	149836	04/10/09 18:33	10.0		1:CL=41
119	099_119	MSS	211350-001	Water	149836	04/10/09 18:51	1.0		1:CL=27
120	099_120	MS	QC491295	Water	149836	04/10/09 19:08	20.0	1	
121	099_121	MSD	QC491296	Water	149836	04/10/09 19:25	20.0	1	
122	099_122	MSS	211350-001	Water	149836	04/10/09 19:43	5.0		
123	099_123	CCV	H		149836	04/10/09 20:00	1.0	1	
124	099_124	CCB			149836	04/10/09 20:18	1.0		
125	099_125	X	CCV		149836	04/10/09 20:35	1.0	1	
126	099_126	X	CCB		149836	04/10/09 20:52	1.0		
127	099_127	X	QC491295		149836	04/10/09 21:10	20.0	1	
128	099_128	X	QC491296		149836	04/10/09 21:27	20.0	1	
129	099_129	SAMPLE	211328-002	Water	149836	04/10/09 21:45	1.0		2:CL=94
130	099_130	X	BLK		149836	04/10/09 22:02	1.0		
131	099_131	SAMPLE	211329-004	Water	149836	04/10/09 22:19	1.0		2:SO4=140
132	099_132	X	BLK		149836	04/10/09 22:37	1.0		
133	099_133	X	BLK		149836	04/10/09 22:54	1.0		
134	099_134	SAMPLE	211329-006	Water	149836	04/10/09 23:12	1.0		2:CL=110
135	099_135	X	BLK		149836	04/10/09 23:29	1.0		
136	099_136	SAMPLE	211329-007	Water	149836	04/10/09 23:46	1.0		2:CL=110
137	099_137	X	BLK		149836	04/11/09 00:04	1.0		
138	099_138	SAMPLE	211329-008	Water	149836	04/11/09 00:21	1.0		3:CL=230
139	099_139	X	BLK		149836	04/11/09 00:39	1.0		
140	099_140	X	BLK		149836	04/11/09 00:56	1.0		
141	099_141	SAMPLE	211329-008	Water	149836	04/11/09 01:13	5.0		1:CL=74
142	099_142	X	BLK		149836	04/11/09 01:31	1.0		
143	099_143	MS	QC491377	Water	149836	04/11/09 01:48	5.0	1	
144	099_144	MSD	QC491378	Water	149836	04/11/09 02:06	5.0	1	
145	099_145	CCV	M		149836	04/11/09 02:23	1.0	1	
146	099_146	CCB			149836	04/11/09 02:41	1.0		
147	099_147	X	CCV		149836	04/11/09 02:58	1.0	1	
148	099_148	X	CCB		149836	04/11/09 03:15	1.0		
149	099_149	X	QC491377		149836	04/11/09 03:33	5.0	1	
150	099_150	X	QC491378		149836	04/11/09 03:50	5.0	1	
151	099_151	SAMPLE	211266-003	Water	149836	04/11/09 04:08	1.0		2:SO4=120
152	099_152	X	BLK		149836	04/11/09 04:25	1.0		
153	099_153	SAMPLE	211266-004	Water	149836	04/11/09 04:42	1.0		1:CL=49
154	099_154	X	BLK		149836	04/11/09 05:00	1.0		
155	099_155	SAMPLE	211266-006	Water	149836	04/11/09 05:17	1.0		1:CL=49
156	099_156	X	BLK		149836	04/11/09 05:35	1.0		
157	099_157	SAMPLE	211328-002	Water	149836	04/11/09 05:52	10.0		
158	099_158	SAMPLE	211328-004	Water	149836	04/11/09 06:09	10.0		
159	099_159	SAMPLE	211329-006	Water	149836	04/11/09 06:27	5.0		1:CL=29
160	099_160	SAMPLE	211329-007	Water	149836	04/11/09 06:44	5.0		1:CL=29
161	099_161	SAMPLE	211329-008	Water	149836	04/11/09 07:02	50.0		
162	099_162	CCV	H		149836	04/11/09 07:19	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629143116

Instrument : IC03
Method : EPA 300.0

Begun : 04/09/09 09:16
SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
163	099_163	CCB			149836	04/11/09 07:37	1.0		
164	099_164	X	CCV		149836	04/11/09 07:54	1.0	1	
165	099_165	X	CCB		149836	04/11/09 08:11	1.0		
166	099_166	X	SHUTDOWN		149836	04/11/09 08:29	1.0		

MJB 04/13/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 9 through 166.

MJB: 04/10/09 ATL: 04/13/09 EAH: 04/17/09

Standards used: 1=S11105 2=S10875 3=S10785

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629150186

Instrument : IC03
 Method : EPA 300.0

Begun : 04/14/09 07:06
 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
007	104_7	X	BLK			04/14/09 07:06	1.0	
008	104_8	X	BLK			04/14/09 07:23	1.0	
009	104_9	X	BLK			04/14/09 07:41	1.0	
010	104_10	CCV	L			04/14/09 08:09	1.0	1
011	104_11	CCB/MB	QC491754	Water	149949	04/14/09 08:49	1.0	
012	104_12	BS	QC491755	Water	149949	04/14/09 09:06	1.0	1
013	104_13	BSD	QC491756	Water	149949	04/14/09 09:24	1.0	1
014	104_14	MSS	211416-001	Water	149949	04/14/09 16:05	10.0	
015	104_15	SAMPLE	211416-002	Water	149949	04/14/09 16:23	10.0	
016	104_16	MS	QC491757	Water	149949	04/14/09 16:40	10.0	1
017	104_17	MSD	QC491758	Water	149949	04/14/09 16:57	10.0	1
018	104_18	CCV	M		149949	04/14/09 17:15	1.0	1
019	104_19	CCB			149949	04/14/09 17:32	1.0	

MJB 04/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 19.

MJB: 04/16/09 ATL: 04/20/09 CP: 04/21/09

Standards used: 1=S11105

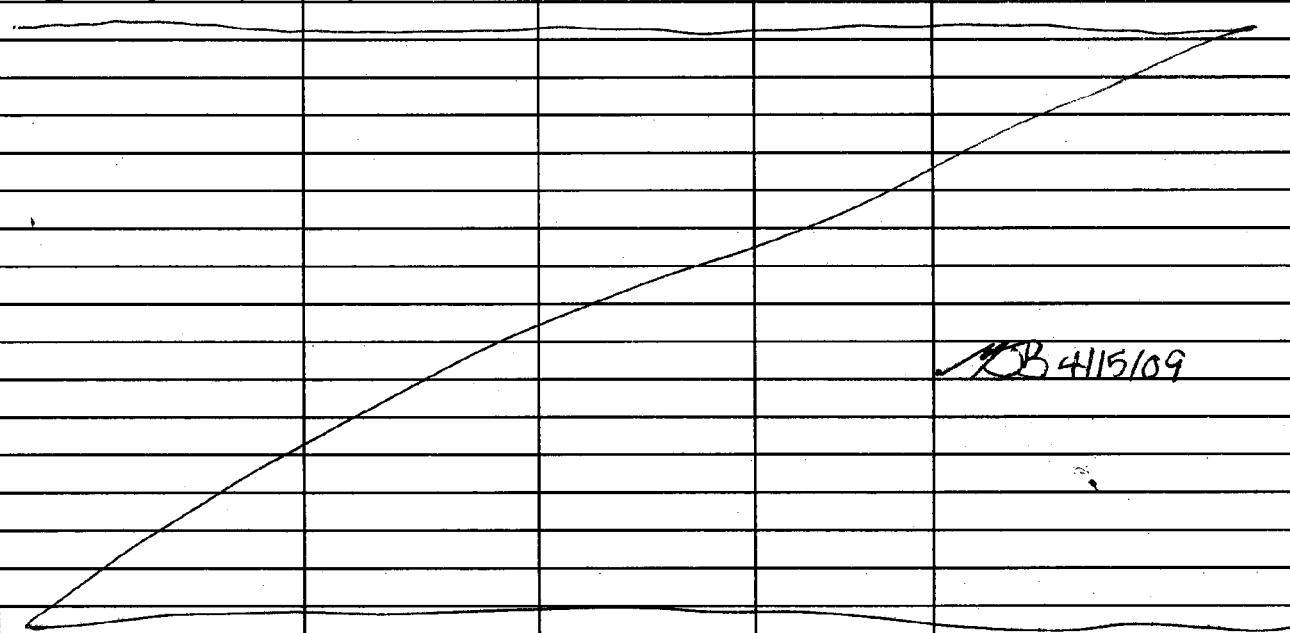
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Analysis: Anions EPA 300 / EPA 9056
 Perchlorate (ClO_4^-) EPA 314
 Cr⁶⁺ EPA 7199

Batch #: 149949
Date Started: 4/14/09
Prep Chemist: JLM

BK 2859
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	211416-001 G	.76	10x	5	<u>NSS</u>
2	↓ -002 ↓	.73	↓	↓	
3	Blank QC 491754	N/A	1x	N/A	
4	BS	755	↓		
5	BSD	756	↓	↓	
6	MS	757	.76	5	
7	MSD	756	↓	↓	
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					<u>KB 4/15/09</u>
18					
19					
20					



	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	<u>100x JLM 2/22/09</u>	<u>KB 4/15/09</u>
BS/BSD Spiked with	<u>.2</u> mL of	
MS/MSD Spiked with	<u>.1</u> mL of	
Filters Used:		
Ag:	OnGuard II Ag	
Na:	OnGuard II Na	
P:	OnGuard II P	
RP:	OnGuard II RP	
S:	<u>0.20um/0.45um</u>	<u>Acme 5/21/05</u>

KB 4/15/09
Extraction Chemist / Date

Continued from page /
Continued on page /

KB 4/15/09
Reviewed by / Date

Laboratory Job Number 211416

ANALYTICAL REPORT

Wet Chemistry

Matrix: Water

Chemical Oxygen Demand

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	150082
Matrix:	Water	Received:	04/14/09
Units:	mg/L	Prepared:	04/17/09 13:00
Diln Fac:	1.000	Analyzed:	04/17/09 15:00

Field ID	Type	Lab ID	Result	RL	Sampled
E027	SAMPLE	211416-001	150	10	04/14/09 10:00
E026	SAMPLE	211416-002	130	10	04/14/09 11:30
	BLANK	QC492277	ND	10	

ND= Not Detected

RL= Reporting Limit

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20.0

Batch QC Report

Chemical Oxygen Demand

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	150082
Field ID:	ZZZZZZZZZZ	Sampled:	04/07/09 10:40
MSS Lab ID:	211272-005	Received:	04/08/09
Matrix:	Water	Prepared:	04/17/09 13:00
Units:	mg/L	Analyzed:	04/17/09 15:00
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD Lim
LCS	QC492278		100.0	105.8	106	85-115	
MS	QC492279	38.08	100.0	114.3	76	75-125	
MSD	QC492280		100.0	118.5	80	75-125	4 20

RPD= Relative Percent Difference

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21.0

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 150082
 Date Started: 17-APR-2009
 Batched by : Patrick Perin

Analysis : COD
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
211270-005		Acme Fill Corp.	Water	COD	20-APR-2009
211272-001		Alco Iron & Metal	Water	COD	20-APR-2009
211272-002		Alco Iron & Metal	Water	COD	20-APR-2009
211272-003		Alco Iron & Metal	Water	COD	20-APR-2009
211272-004		Alco Iron & Metal	Water	COD	20-APR-2009
211272-005		Alco Iron & Metal	Water	COD	20-APR-2009
211416-001		Baseline Environme	Water	COD	20-APR-2009
211416-002		Baseline Environme	Water	COD	20-APR-2009
211453-001		Baseline Environme	Water	COD	21-APR-2009
QC492277	BLANK		Water	COD	
QC492278	LCS		Water	COD	
QC492279	MS	of 211272-005	Water	COD	
QC492280	MSD	of 211272-005	Water	COD	

Analysis: COD - Chemical Oxygen Demand
 FCOD - Chemical Oxygen Demand (Filtered)
 Analyst: PAP
 Prep Date: 4/17/2009
 Method: SMWW 5220D / EPA 410.4
 Analysis Date: 4/17/2009
 Instrument: Hach DR 2600
 Wavelength: 600 nm
 Batch Number: 150082 COD
 SOP#: COD_rv 10.doc
 Batch Number: 150082 FCOD

INITIAL CALIBRATION		Calibration Date: 6/30/2008	
	ABS	RF	
0	0.000	NA	
10	0.004	0.000400	Correlation Coefficient: 0.999
20	0.012	0.000600	
40	0.018	0.000450	Average Response Factor: 0.000473
80	0.037	0.000463	%RSD: 13
100	0.046	0.000460	
130	0.061	0.000469	Note: Sample results based on average response factor.
150	0.070	0.000457	

CALIBRATION VERIFICATION DATA							
	ABS	Result	True Value (mg/L)	%Rec	Limits		
ICV	2	1	0.050	105.79	100	100%	90 - 110%
ICB	2	1	0.000	ND			
CCV	2	1	0.049	103.68	100	104%	90 - 110%
CCB	2	1	0.000	ND			
CCV	2	1	0.049	103.68	100	104%	90 - 110%
CCB	2	1	0.000	ND			
QC DATA	Sample Vol. Used (mL)	Dilution Factor	ABS	RESULT (mg/L)	Spike (mg/L)	True Value (mg/L)	RPD
MB	2	1	0.000	ND			10
LCS	2	1	0.050	105.79	100		106
211272-005	2	1	0.018	38.08			10
MS	1	1	0.027	114.25	100		76
MSD	1	1	0.028	118.49	100	4	80
							20

QC Limits	Recovery	RPD
LCS/ BS/ BSD	90 - 110	20
SSPIKE/ SDUP	86 - 129	20

Reviewed by / Date: Curtis 4/12/09

Curtis & Tompkins, Ltd.
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Rev.10.2, Effective 1/28/08

Analysis: COD - Chemical Oxygen Demand Prep Date: 4/17/2009
 FCOD - Chemical Oxygen Demand (Filtered) Analysis Date: 4/17/2009
Method: SMWW 5220D / EPA 410.4 Batch Number: 150062

SAMPLE	Sample Vol. Used (mL)	Dilution Factor	ABS	RESULT (mg/L)	Reporting Limit (mg/L)
211270-005	2	8	0.040	677.06	80
211272-001	2	20	0.042	1,777.30	200
211272-002	2	8	0.048	812.48	80
211272-003	2	1	0.019	40.20	10
211272-004	2	1	0.011	23.27	10
211416-001	2	1	0.069	146.99	10
211416-002	2	1	0.062	131.18	10
211453-001	2	1	0.036	76.17	10

FCOD: Samples filtered thru' a Whatman 934-AH glass fiber filter prior to analysis.

Reviewed by / Date: 7/11 4/7/09

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F:\inorgan\wetstuff\cod.xls

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Rev.10.2, Effective 1/28/08

COD (Chemical Oxygen Demand) - SM 5220D

Curtis & Tompkins, Ltd.

LIMS Batch #: 150082
Analyzed by: DG

Filtered (y/n):
Filter Lot#:

Benchbook#: BK2850
Page: 29

Date ON: 4/17/09
Time ON: 13:00
Temp ON: 15.9°C

Date OFF: 4/17/09
Time OFF: 15:00 PAP 4/17/09
Temp OFF: 15.0°C

Short-Range Tubes (wavelength: 600nm), Lot#: 19061
 Long-Range Tubes (wavelength: 620nm), Lot#:

KHP LIMS#: 89628
Std Conc (mg/L): 100
Std Vol Added (mL): 20.000000000000002 - 2
100.00000000000002 - 2

Analyst / Date

4/17/09

Reviewed by / Date

Dissolved Sulfide

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Analysis:	SM4500S2-D
Project#:	Y0239-04.A3		
Analyte:	Dissolved Sulfide	Batch#:	150111
Matrix:	Water	Sampled:	04/14/09
Units:	mg/L	Received:	04/14/09
Diln Fac:	1.000	Analyzed:	04/20/09

Field ID	Type	Lab ID	Result	RL
E027	SAMPLE	211416-001	0.07	0.04
E026	SAMPLE	211416-002	0.04	0.04
	BLANK	QC492394	ND	0.04

ND= Not Detected

RL= Reporting Limit

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24.0

Batch QC Report

Dissolved Sulfide

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Analysis:	SM4500S2-D
Project#:	Y0239-04.A3		
Analyte:	Dissolved Sulfide	Diln Fac:	1.000
Field ID:	E024	Batch#:	150111
MSS Lab ID:	211482-002	Sampled:	04/16/09
Matrix:	Water	Received:	04/16/09
Units:	mg/L	Analyzed:	04/20/09

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC492395		0.8530	0.8003	94	88-114		
MS	QC492396	0.1228	0.8530	0.9650	99	75-125		
MSD	QC492397		0.8530	0.9582	98	75-125	1	20

RPD= Relative Percent Difference

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25.0

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 150111
Date Started: 20-APR-2009
Batched by : Benjamin Phillips

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
211416-001			Baseline Environme Water	DISS SULFIDE	20-APR-2009
211416-002			Baseline Environme Water	DISS SULFIDE	20-APR-2009
211453-001			Baseline Environme Water	DISS SULFIDE	21-APR-2009
211482-001			Baseline Environme Water	DISS SULFIDE	22-APR-2009
211482-002			Baseline Environme Water	DISS SULFIDE	22-APR-2009
QC492394	BLANK		Water	DISS SULFIDE	
QC492395	LCS		Water	DISS SULFIDE	
QC492396	MS	of 211482-002	Water	DISS SULFIDE	
QC492397	MSD	of 211482-002	Water	DISS SULFIDE	

Analysis:
DISSOLVED SULFIDE
SARWW 4500S2-D / EPA 376.2
Method:
Instrument: Perkin-Elmer Lambda 25
Wavelength: 626 nm
SOP#: sulfide_376_rv 4.doc

Analyst: BJP
Prep Date: 04/20/09
Analysis Date: 04/20/09
Batch: 150111
Matrix: Water

INITIAL CALIBRATION DATA

Conc (mg/L)	Absorb	RF	Calibration Date:
0.000	0.0000		
0.027	0.0100	0.3704	
0.053	0.0214	0.4038	
0.213	0.1007	0.4728	
0.444	0.2101	0.4732	
0.889	0.4171	0.4692	
1.778	0.8169	0.4594	

CONTINUING CALIBRATION DATA

ICV/ LCS	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV/ MBB	0.3533	0.8003	0.8533	94%	90 - 110%
	0.0000	0.0000	0.00		
CCV	0.3537	0.8012	0.8533	94%	90 - 110%
CCB	0.0000	0.0000	0.00		

Reviewed by / date: BP 4/20/09

Curtis & Tompkins, Ltd.
\W:\st\drive\m\organ\data\April 2009\sulfide\H2O-dissolved 150111

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Version 10.3, Effective 1/26/08

Analysis: DISSOLVED SULFIDE
Method: SMWW 4500S2-D / EPA 376.2

Prep Date: 4/20/09
Analysis Date: 4/20/09
Batch: 150111
Matrix: Water

Sample & Batch QC	Sample Vol (mL)	D.F.	Sample Color Blk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
TIB	7.5000	1.0000	0.0001	ND	0.040	0.040	0.0500	128.00	0.853	94
LCS / BS	7.5000	1.0000	0.3533	0.8903	0.040	0.0500	128.00	0.853	94	1
211482-002	7.5000	1.0000	0.0542	0.1228	0.040	0.0500	128.000	0.853	99	99
MS	7.5000	1.0000	0.4260	0.9650	0.040	0.0500	128.000	0.853	98	98
MSD	7.5000	1.0000	0.4230	0.9582	0.040	0.0500	128.000	0.853	98	98
211416-001	7.5000	1.0000	0.0307	0.0695	0.040					
211416-002	7.5000	1.0000	0.0197	0.0446	0.040					
211453-001	7.5000	1.0000	0.0129	ND	0.040					
211482-001	7.5000	1.0000	0.0064	ND	0.040					
211482-002	7.5000	1.0000	0.0542	0.1228	0.040					

$$\text{Normality} = \frac{[(V_1 * N_1) - (V_{Na} * N_{Na})] * 160000}{V_S}$$

$$V_1 = 5.00$$

$$N_1 = 0.0250$$

$$V_{Na} = 4.20$$

$$N_{Na} = 0.0250$$

$$V_S = 0.10$$

$$\text{Concentration} = \frac{3200}{128} \text{ mg/L}$$

128 (25x dilution used for spiking)

V₁, N₁ are the volume and normality of the iodine solution

V_{Na}, N_{Na} are the volume and normality of the sodium thiosulfate solution

V_S is the volume of the sulfide standard (1.0mL.)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	54 - 130

Reviewed by / date: Theresa H. H. 4/20/09

Curtis & Tompkins, Ltd.
11011 1/2 Drive, Langley, BC V1M 4G1
April 2009 sulfide-H2O-dissolved 150111

page 2 of 2
Version 10.3, Effective 1/20/08

Date : 4/20/2009 Time : 13:24:51

Concentration Results

Date: 4/20/2009 Time: 1:23:19 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULF1008
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 150111.RCO
Autozero performed: 4/20/2009 1:23:18 PM
Analyst: 0.00 [analyst]

Wavelength(s)	Sample ID	Ordinate	Factor	Concentration	Sample Info
626.0	0.0	ICB_MB	0.0001	1.0000	0.0001 mg/L
626.0	0.0	ICV_LCS	0.3533	1.0000	0.7647 mg/L
626.0	0.0	416-1	0.0307	1.0000	0.0664 mg/L
626.0	0.0	416-2	0.0197	1.0000	0.0427 mg/L
626.0	0.0	453-1	0.0129	1.0000	0.0280 mg/L
626.0	0.0	482-1	0.0064	1.0000	0.0139 mg/L
626.0	0.0	482-2	0.0542	1.0000	0.1174 mg/L
626.0	0.0	482-2MS	0.4260	1.0000	0.9221 mg/L
626.0	0.0	482-2MSD	0.4230	1.0000	0.9155 mg/L
626.0	0.0	CCV	0.3537	1.0000	0.7655 mg/L
626.0	0.0	CCB	-0.000	1.0000	-0.000* mg/L

Date : 4/20/2009 Time : 13:23:22

CALIBRATION

Date: 4/20/2009 Time: 1:23:18 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULF1008
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: WETCHEM

Wavelength(s)	Sample ID	Concentration	Ord. value	Comment
626.0	0.0	1.A01	0.0000 mg/L	-0.000 EMD 48196839
626.0	0.0	2.A02	0.0270 mg/L	0.0100 EMD 48196839
626.0	0.0	3.A03	0.0530 mg/L	0.0214 EMD 48196839
626.0	0.0	4.A04	0.2130 mg/L	0.1007 EMD 48196839
626.0	0.0	5.A05	0.4440 mg/L	0.2101 EMD 48196839
626.0	0.0	6.A06	0.8890 mg/L	0.4171 EMD 48196839
626.0	0.0	7.A07	1.7780 mg/L	0.8169 EMD 48196839

Equation: $y = 4.620356e-01 * x$

Residual error: 0.004219

Correlation coefficient: 0.999901

Sample	Vol. collected (4/20/09)	DF	A85 Sea date
JCB/MB	7.5 mL	1x	
* JCU/CCS			
211416-1	H		
↓ -2	↓		
211453-1	I		
211482-1	H		
↓ -2	↓		
* ↓ -2 MS	↓		
* ↓ -2 MSD	↓		
* CCV			
CCB	↓	↓	↓
Pl., 0.050-2 of 128 mg/L Std. (SG665) (See EX(E))			
VWR Filter 28145-503, Lot 193388			

Continued on Page

Read and Understood By

Signed

4/20/09

Date

Signed

4/20/09

Date

pH

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 9040C
Analyte:	pH	Batch#:	149957
Matrix:	Water	Received:	04/14/09
Units:	SU	Analyzed:	04/14/09 21:10
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
E027	211416-001	8.3	1.0	04/14/09 10:00
E026	211416-002	8.1	1.0	04/14/09 11:30

RL= Reporting Limit

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11.0

Batch QC Report

pH

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	EPA 9040C
Analyte:	pH	Units:	SU
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	149957
MSS Lab ID:	211409-002	Sampled:	04/14/09 11:02
Lab ID:	QC491784	Received:	04/14/09
Matrix:	Water	Analyzed:	04/14/09 21:10

MSS	Result	Result	RL	RPD	Lim
	7.700	7.690	1.000	0	20

RL= Reporting Limit

RPD= Relative Percent Difference

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12.1

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 149957
Date Started: 14-APR-2009
Batched by : Shu Ting Liu

Analysis : PH
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
211409-002		IMTT	Water	PH	17-APR-2009
211416-001		Baseline Environme	Water	PH	20-APR-2009
211416-002		Baseline Environme	Water	PH	20-APR-2009
211418-004		Polymatrix	Water	PH	24-APR-2009
211418-009		Polymatrix	Water	PH	24-APR-2009
QC491784	SDUP	of 211409-002	Water	PH	

pH Analysis Benchbook

Curtis & Tompkins, Ltd.

LIMS Batch #: 149957
Matrix: water
Analyst: SPC

Date: 4/14/09
Time: 7:10

Benchbook#: BK2871
Page: 4

Method (check one):

Water (EPA 9040c/ SM4500H+B)

Soil (EPA 9045c)

Cal Std-1 ph: 4 LIMS#: S10608
Cal Std-2 ph: 7 LIMS#: S7872
Cal Std-3 ph: 10 LIMS#: S11168

Slope: 101.5
(slope limits: 92 - 102)

* 2nd aliquot must be within 0.1 SU

Suz 4/14/09

Analyst / Date

[Signature] 4/15/09

Reviewed by / Date

Total Suspended Solids (TSS)

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Sampled:	04/14/09
Matrix:	Water	Received:	04/14/09
Units:	mg/L	Analyzed:	04/16/09
Batch#:	150027		

Field ID	Type	Lab ID	Result	RL	Diln Fac
E027	SAMPLE	211416-001	59,000	170	33.00
E026	SAMPLE	211416-002	57,900	500	100.0
	BLANK	QC492063	ND	5	1.000

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

18.0

Batch QC Report
Total Suspended Solids (TSS)

Lab #:	211416	Location:	Doyle Drive
Client:	Baseline Environmental	Prep:	METHOD
Project#:	Y0239-04.A3	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Batch#:	150027
Field ID:	ZZZZZZZZZZ	Sampled:	04/15/09
MSS Lab ID:	211443-001	Received:	04/15/09
Matrix:	Water	Analyzed:	04/16/09
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln	Fac
BS	QC492064		50.00	48.00		96	75-125			1.000	
BSD	QC492065		50.00	49.00		98	75-125	2	20	1.000	
SSPIKE	QC492066	158.0	100.0	176.0		18 *	38-146			2.000	
SDUP	QC492067	158.0		154.0	10.00			3	20	2.000	

* = Value outside of QC limits; see narrative

RL= Reporting Limit

RPD= Relative Percent Difference

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 150027
 Date Started: 16-APR-2009
 Batched by : Shu Ting Liu

Analysis : TSS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
211304-002		Polymatrix	Water	TSS	21-APR-2009
211304-006		Polymatrix	Water	TSS	21-APR-2009
211347-001		Alco Iron & Metal	Water	TSS	22-APR-2009
211347-002		Alco Iron & Metal	Water	TSS	22-APR-2009
211347-003		Alco Iron & Metal	Water	TSS	22-APR-2009
211347-004		Alco Iron & Metal	Water	TSS	22-APR-2009
211416-001		Baseline Environme	Water	TSS	20-APR-2009
211416-002		Baseline Environme	Water	TSS	20-APR-2009
211419-001		Polymatrix	Water	TSS	24-APR-2009
211419-002		Polymatrix	Water	TSS	24-APR-2009
211438-001		California Oils Co	Water	TSS	27-APR-2009
211443-001		Acme Fill Corp.	Water	TSS	27-APR-2009
211449-001		Polymatrix	Water	TSS	27-APR-2009
211449-002		Polymatrix	Water	TSS	27-APR-2009
211453-001		Baseline Environme	Water	TSS	21-APR-2009
QC492063	BLANK		Water	TSS	
QC492064	BS		Water	TSS	
QC492065	BSD		Water	TSS	
QC492066	SSPIKE of 211443-001		Water	TSS	
QC492067	SDUP of 211443-001		Water	TSS	

Analysis:
Method:

Total Suspended Solids
SMWW 2540D / EPA 160.2

Water
TSS_nv6

Analyst: STL
Analysis Date: 16-Apr-09
Batch #: 150027

Sample	Vol (mL)	DF	Filter	Constant	Residue	Report	Reporting	Spike Std	Spike Vol	Spiked	
WB	100	1	0.1117	0.1119	0.0002	ND	Limit (mg/L)	Conc.(mg/L)	Used (mL)	@ (mg/L)	Recovery, %
BS	100	1	0.1114	0.1162	0.0048	48	5	500	10	50	96
BSD	100	1	0.1104	0.1153	0.0049	49	5	500	10	50	98
211443-001	50	2	0.1111	0.1190	0.0079	158	10	500	10	100	18 *
SSPIKE	50	2	0.1095	0.1183	0.0088	176	10	500	10	100	18 *
SDUP	50	2	0.1101	0.1178	0.0077	154	10				3
211304-002	30	3	0.1107	0.1161	0.0054	180	17	QC Limits	RPD	Recovery	
211304-006	100	1	0.1113	0.1133	0.0020	20	5	LC/BS/BS	20	80	- 120
211347-001	100	1	0.1108	0.1169	0.0061	61	5	MS/ MSD	39	38	- 146
211347-002	100	1	0.1088	0.1111	0.0023	23	5				
211347-003	100	1	0.1107	0.1122	0.0015	15	5				
211347-004	100	1	0.1119	0.1125	0.0006	6	5				
211416-001	33	0.1127	0.2896	0.1769	58.967	167					
211416-002	100	0.1098	0.1677	0.0579	57,900	500					
211419-001	100	1	0.1110	0.1186	0.0076	76	5				
211419-002	100	1	0.1104	0.1176	0.0072	72	5				
211438-001	50	2	0.1114	0.1218	0.0104	208	10				
211443-001	50	2	0.1111	0.1190	0.0079	158	10				
211449-001	100	1	0.1102	0.1158	0.0056	56	5				
211449-002	100	1	0.1103	0.1143	0.0040	40	5				
211453-001	1	100	0.1121	0.1356	0.0235	23,500	500				

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by / date: MM/11/2010
F:\Inorg\andata\April 2009\tss-150027

Curtis & Tompkins, Ltd
F:\Inorg\andata\April 2009\tss-150027

Version 6.6, Effective 1/28/08

TSS (Total Suspended Solids)

SM 2540D / EPA 160.2

SL4/16/09

LIMS Batch #: 15

LIMS Batch #: 15150

Filtered by (initials): ST

Filter Mfg/ Lot#: E.E. 79938R

Spike Std LIMS#: 511691

Prep Date: 4/16/09

Prep Time: 14:40

Curtis & Tompkins, Ltd.

Benchbook#: BK2814

Page: 43

Spike Std Conc (mg/L): 500

Spike Std Vol Added (mL):

	In	Out	In-2	Out-2	In-3	Out-3
Date:	4/16/09	4/16/09	4/16/09	4/16/09		
Time:	15:28	16:20	17:30	18:30		
Temp (C):	105°	105°	105°	105°		
Weighed by:	STL		STL			

* Constant weight must be within 0.0005 from previous reading.

82 4/6/09

✓ 4/17/09
Reviewed by / Date

Analyst / Date